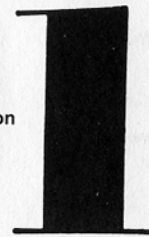


**Famous Artists Cartoon Course**

**Westport, Connecticut**

# **The comic head**

Lesson



Rube Goldberg

Milton Caniff

Al Capp

Harry Haenigsen

Willard Mullin

Gurney Williams

Dick Cavalli

Whitney Darrow, Jr.

Virgil Partch

Barney Tobey





The cartoon head has height, width, and depth and is shaped somewhat like a toy balloon. By running one guide line around it to locate the eyes and ears, and another line up and down it to locate the nose and mouth, you can use this balloon shape to create cartoon heads of every type



## The comic head

When you meet a friend the first thing you look at is his face. You say, "You look fine" or "You look sick" or "You look sad" or "You look happy." You recognize Joe or Bill or Mary by the eyes or nose or ears or hair. The good Lord is an expert at putting people together so you can identify them easily. Each of us has different features — even twins are not really identical — and, in addition, each of us has a definite and individual personality. As an observer and recorder of the human race, you must have an awareness not only of the surface differences between people but also of what makes them tick. In general, you must become a psychologist. A good understanding of the emotional differences between people will help you to create cartoon characters that will react properly to any set of circumstances and leave no doubt in the reader's mind as to the type of people they are.

From now on we want you to start thinking like a cartoonist. Stop looking at your friends as Joe, Bill or Mary. Instead, think of them as Joe, the big-mouthed showoff; Bill, the little mouse; and Mary, the girl that's afraid of her husband, kids and the family goldfish. Open your eyes and see the people around you. Watch and study their actions and reactions. The painter hires models to pose for him, but you, as a cartoonist, want no planned poses. You want your models to act naturally against a natural background. So wherever you are, at work, at play or at the supermarket, keep your eyes and your mind open — your eyes to study the physical differences and your mind to gain an understanding of your subjects' personalities.

Because the face and head are the most expressive parts of the figure, we naturally take them up first. The method we use to draw them may appear simple, but please remember that every head or face, from the simple exaggerated cartoon head to the very realistic head of the illustration and adventure-strip type, is built upon the same basic principles. All heads are shaped somewhat like a balloon and have two eyes, two ears, one nose and one mouth. In the pure comic or highly stylized type, these features may be exaggerated or even placed in extreme positions in relation to each other, but the basic principles of head construction are still the same as those used to draw the realistic type. Page 10 illustrates this basic relationship of all cartoon heads. Study it carefully and note how each of the different men has made use of the same basic principles and features to create his own individual characters.

In starting to draw the cartoon head, think of it as being like a child's balloon — something that has thickness as well as height and width. The photo of the balloon on the opposite page will demonstrate what we mean. The balloon has depth — a third dimension. If you let yourself think of it as a flat circle, you will end up with a lot of characters drawn without any feeling of solidity. Remember that the head is a sphere and, when the features are placed on its surface properly, they will give the effect of being drawn on a curve rather than a flat plane.

Get in the habit of dashing your balloons off freely. Let your pencil go around the balloon shape three or four times. Don't

try to make a perfect single-line balloon or oval, or draw the balloon with a compass. Do them freehand. The pencil work is only a guide upon which you will construct the cartoon head. If it is a little lopsided or bumps out on the side, don't worry about it. Sometimes these irregularities will suggest an entirely new type of character to you. Also, when drawing the balloon outline, do not get in the habit of bearing down too heavily with your pencil. In later lessons, to finish your cartoons, you will go over their outlines in ink; if your penciling is too dark, it will be almost impossible to erase after inking.

The important thing to remember when drawing any cartoon is to keep it simple. The simple, direct approach of cartooning has an instantaneous effect upon an audience. Because of its directness and clarity, the cartoon has become well established in every field of visual communication, including television and advertising. Keep in mind the importance of the simple, direct approach when you draw the cartoon heads for this lesson. Strive constantly to capture, in as few and as simple lines as possible, the personality and feeling of the character you are drawing. Avoid overdrawing or shading, particularly in the cartoon face. Remember that too many fine lines, instead of strengthening an expression, will often kill it. Make simplicity your watchword.

Many times throughout your Course we will remind you of the importance of practice. We particularly stress it here because the cartoon head is so basic. By practice we do not mean that you are to spend only ten or fifteen minutes a day at your studies. We mean that you should draw every chance you get.

Form right now the habit of carrying a sketch pad with you wherever you go. Sketch pads come in all sizes, and there is a small size that will fit in a coat pocket or a handbag. Every time you see an interesting face, jot it down in a quick sketch. Don't stiffen up and make work of it or worry about producing a clean, finished pencil drawing. You are interested in capturing a character or an expression, and a fast sketch will often do that better than a painstaking drawing. If you are all alone in the dentist's waiting room and there are no models present, just draw faces from memory. The important point is to keep drawing.

Learning to draw cartoons is a serious business. Fortunately, however, there is just as much pleasure in it as there is work. Cartooning has often been called "the happy art," and drawing comic heads is one of the happiest parts of it. So grab a pencil and start swinging them in. Don't expect every head you draw to be a masterpiece — but do expect them to get better as you give them more time and thought — and, above all, have fun drawing them!

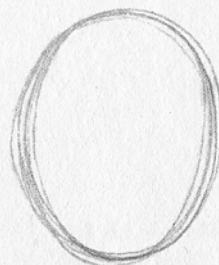
For this first lesson, all the materials you need are some soft pencils (2B or 3B), some 8½ x 11-inch Bond typing paper, and an Artgum or kneaded rubber eraser, and you are ready to go to work. Remember, when buying supplies, that a good craftsman likes to use good tools. Luckily for the cartoonist, pencils are inexpensive. When one gets too short for comfort, throw it away or give it to the ladies' bridge club.



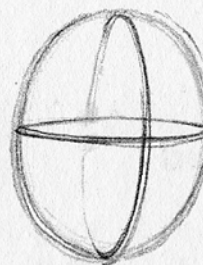
## Drawing the balloon head

Before beginning to draw cartoon heads, you must learn to draw the balloon shape freely and quickly. Never use a compass. To form your balloon, swing the pencil around several times on the paper. The freely drawn balloon will be only a guide for the general shape of the head, so make it light — you can strengthen the outline later. Practice drawing balloons about the size shown here, because most of your work as a cartoonist will call for heads this size or smaller.

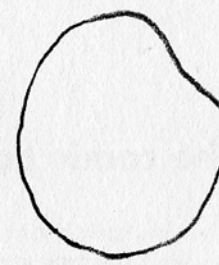
After you have gotten the hang of drawing the balloons and can dash them off easily, you are ready to swing the two guide lines in. Sketch these lines as though they go completely around the balloon. This will give the head a solid, three-dimensional quality and keep you from drawing flat, pancake-type faces. Then start drawing in the eyes, nose, mouth and ears, following the principles demonstrated here.



Swing balloon in freely.  
Don't use a compass

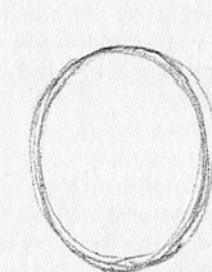


Add guide lines

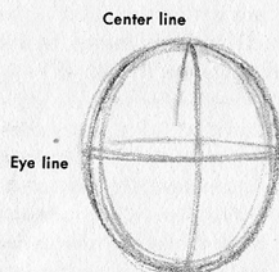


Don't draw it like this  
with a single hard line

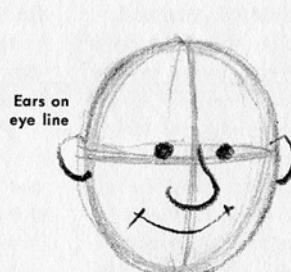
### Front view



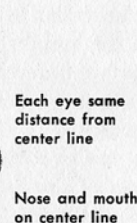
1 Draw the balloon shape



2 Add the guide lines

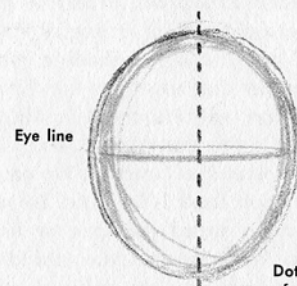
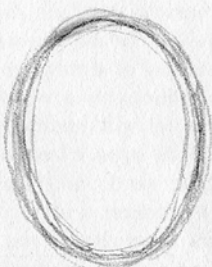


3 Locate the features

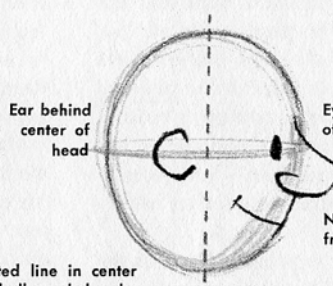


4 Add details (eyebrows, hair,  
wrinkles, etc.) — firm up outline

### Side view

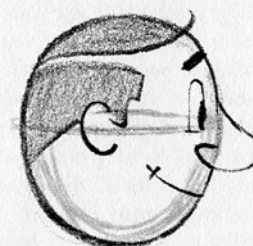


Eye line



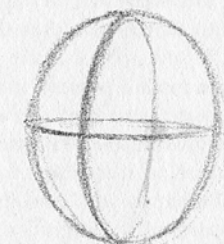
Dotted line in center  
of balloon helps lo-  
cate ear

Eye close to edge  
of balloon  
Nose extends out  
from balloon

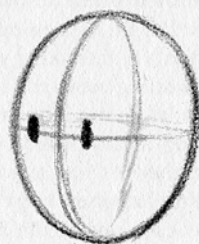


### 3/4 Front view

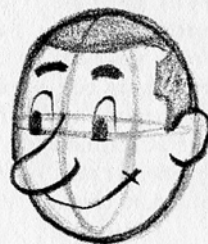
The center line indicates the direction the head faces. The more the head turns to the side, the more the center line curves.



1 Center line curves as head  
turns from dead center



2 Eyes located in proper  
relation to center line



3 Nose on center line—side  
of nose shows

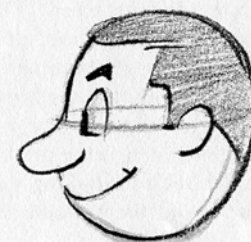
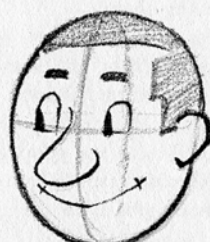
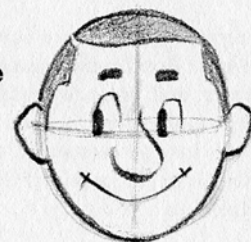
As the head turns, the  
nose projects outward  
from the balloon

Ear at rear of head



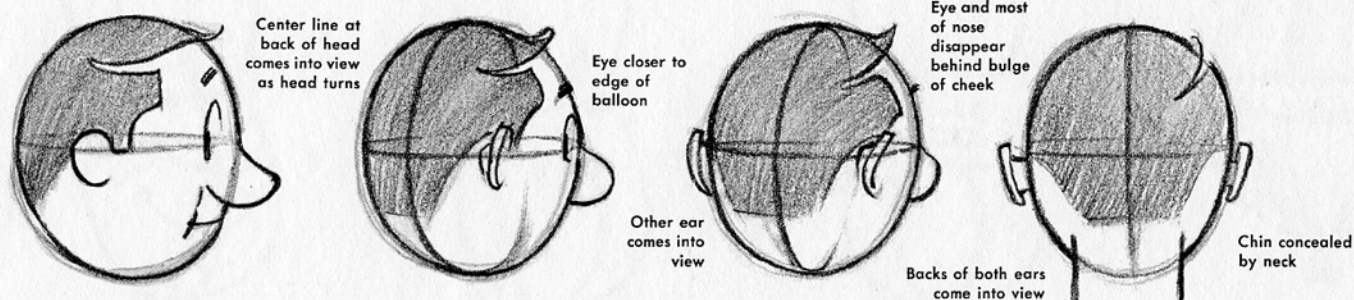
If the head faces in the opposite di-  
rection, the center line will be curv-  
ing in that direction

### Front to side

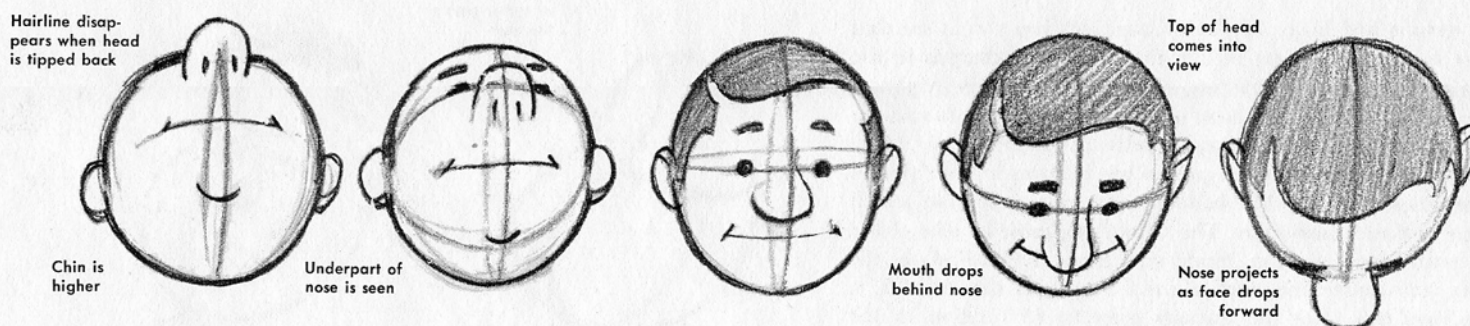


By varying the amount of curve to the center line, the head can be made to turn to any desired position. Note how the ear moves toward the center as the head turns to the side

## Turning the head



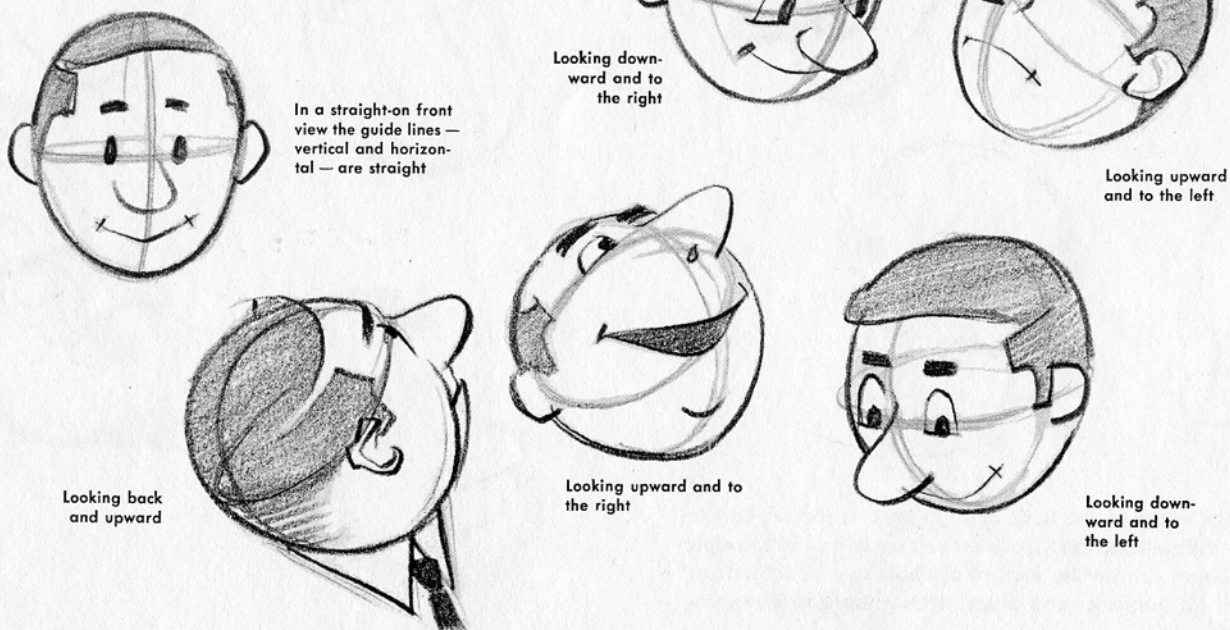
## Looking up and down



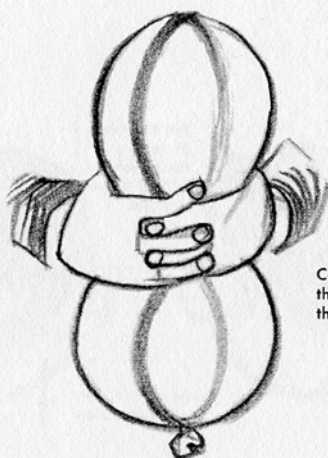
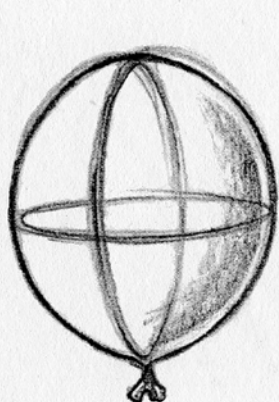
The curve of the eye line indicates whether the head is tipped back, level or tilted forward.

## Angles

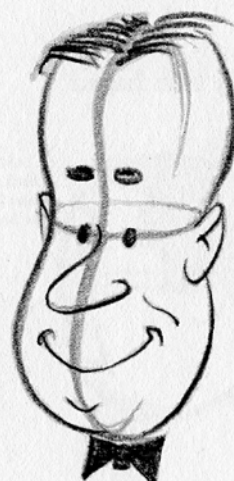
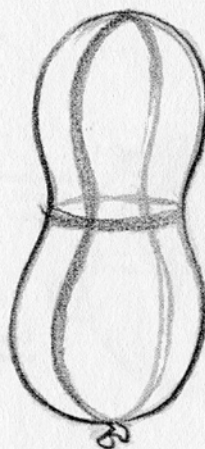
By combining the curved eye line with a curved center line, the head can be drawn to face in any direction and at whatever angle you wish. Establish these guide lines first and you should have little trouble locating the features properly no matter at which angle the head is tilted or turned.







Center line follows  
the contours of  
the balloon

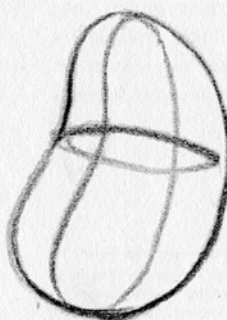
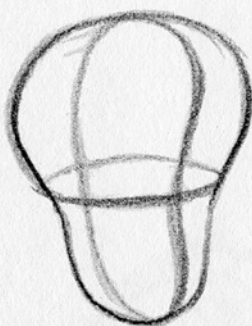
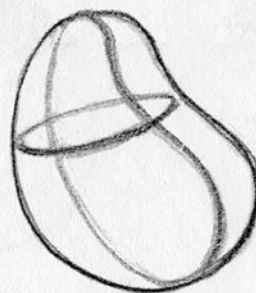


Center line runs  
over top of head  
and underneath  
the chin . . . helps  
locate the necktie  
or center part of  
the hair

### Changing the shape of the balloon

If everyone had his or her hair shaved off, you would see that there is as much variety in the human head as there is in the tops of a range of mountains. Human heads come in almost every shape, from a lima bean to a toy top — and so do cartoon heads. The round balloon head is only the beginning.

Imagine that you are grasping a toy balloon in your hands. Now squeeze it hard. The balloon changes its shape but it still keeps its three dimensions. The same thing must be true of the different-shaped cartoon heads you draw. Regardless of the form, your center line must follow the curve of that form. If it does, you can place the features correctly in relation to the center line and maintain the three-dimensional effect.



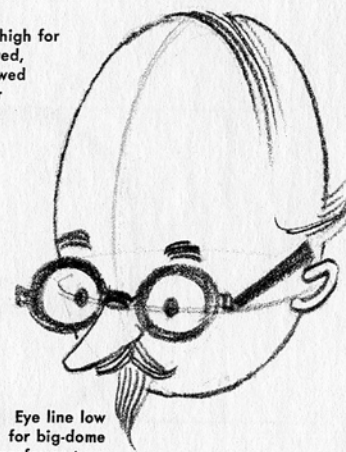
Changing the shape of the basic balloon head is the key to creating many different cartoon types. As you see here, just a couple of varied shapes can be the start of a whole cast of interesting characters — Milquetoasts and mugs, debutantes and dowagers, seadogs and swamis.

## Varying the location of the features

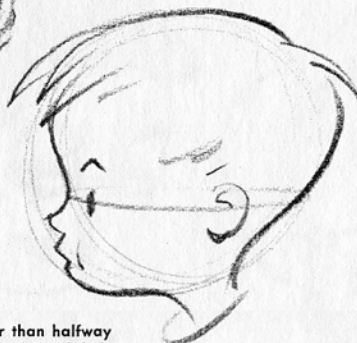
While the eye line is usually halfway between the top of the head and the chin, interesting cartoon characters of many different types can be created by raising or lowering this line. Even with balloons of the same shape a shift in the eye line can be the start of a new character. Keep in mind, however, that since the features are evenly balanced on each side of the center line, this line serves as a fixed guide for locating them.



Eye line high for low-browed, heavy-jawed character



Eye line low for big-dome professor type



Draw the eye line lower than halfway on the heads of cute gals and kids



No matter where the eye line is placed or at what angle it is drawn, it should serve as a guide for locating the ear

## Hair on the head and face

In the simple cartoon head, hair makes the head male or female. When it comes to hair, anything goes — from the last precious few of the almost bald gent to the weird result of milady's latest visit to the beauty parlor. Every successful cartoon character has its own distinctive hairdo. Hair is important stuff.



In this simple cartoon head, hair makes the character male or female



Simple solid black for dark hair



If you show highlights, keep them simple



Too many scattered highlights break up the form



When drawing hair, always be aware of the balloon outline. Be sure the hair extends beyond the basic form



Express the form of the hair simply, with a few shaping strokes



Don't try to draw every strand

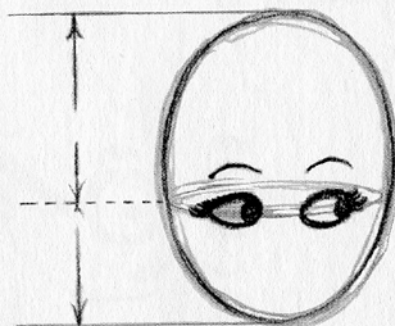


Hats go around the head

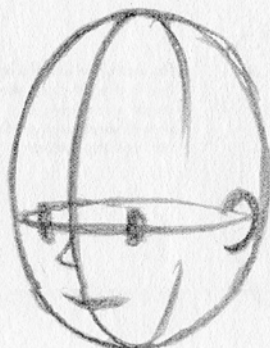


## Girls' heads

Girls' heads are constructed the same way as any others, but they will appear cuter and more glamorous if the eye line is drawn lower than halfway. Remember to keep the outlines of the face smooth and simple and give emphasis to hair, eyes, and lips. Later in the Course, girls will be treated in greater detail. For now, this page will give you a good basic start. Girls add up to more than half of the human race. Learn to draw them well!



Draw the eye line low



Sketch in the balloon shape and add the guide lines to show the direction the head faces and the degree it tilts up or down. Then lightly indicate the location of the features. From this point on, the details you add and the facial expression you give her will determine her type



Simple blonde hair, wide open eyes, turned-up nose and pleasant smile create a typical cute gal



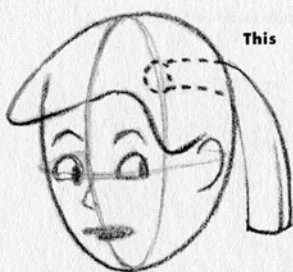
Dark hair and eyes, straight nose and full lips create the exotic type. Beauty patch, flower in hair, etc., add a sultry effect

Don't be afraid to exaggerate eyes and lips. But keep the nose relatively small



Bangs, pigtails and simplified eyes and mouth make her a member of the younger set

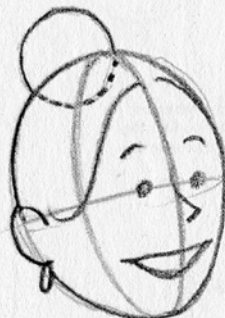
## Hairdo tips



This

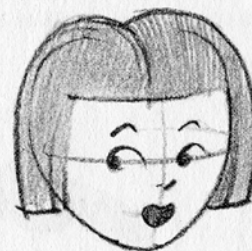
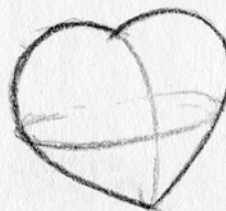


Not this



Carrying the center line around and behind the head will help you draw a partially visible hairdo correctly in 3/4 front views of the head. Note that the base of the ponytail stems from this center line . . . the bun is centered on it

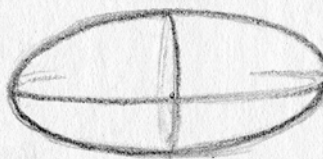
## Vary the head shape for different types



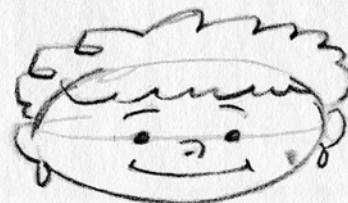
Heart shape for sweet young thing

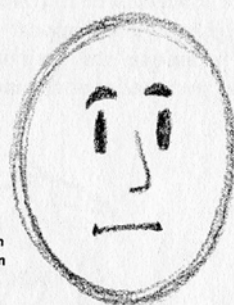


Pear shape for the gal who ought to diet



Flattened balloon for simple animated cartoon heads





The eyes and mouth make the expression

## Facial expression

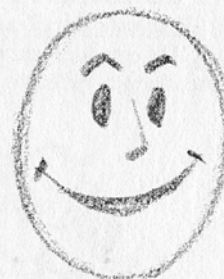
If a cartoon character is to be animated and interesting to the reader, it must express exactly the right emotion. Later in the Course we will show you how the whole figure can be used to express emotions, but, for now, we are concerned with the head and face. Joy, sorrow, anger, and other moods are shown chiefly in the face and you should learn all you can about how to draw them.

A good way to begin is to study the faces of the people around you, and the different moods they express. Also, set up a mirror and study your own features as you register various emotions. See what happens to eyes, eyebrows, mouth corners, etc., and practice drawing what you see.

A good cartoonist doesn't just think of his character's expressions and emotions—he feels them. This is what gives his characters conviction. Watch even the most experienced cartoonist at work and you will note that when he draws an unusual expression on the face of a character, his own face unconsciously assumes that expression.



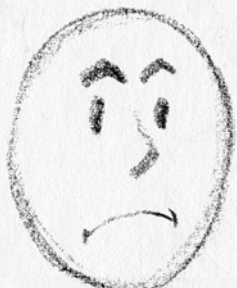
**Pleased**—Mouth curves upward



**Amused**—Mouth partly open and corners raised



**Hilarious**—Mouth wide, eyes half closed



**Sad**—Mouth curves downward



**Surprised**—Mouth an "O," eyebrows raised



**Frightened**—Mouth wider, eyebrows high



**Displeased**—Mouth corners turned down



**Grim**—Mouth a straight line, eyes squinted



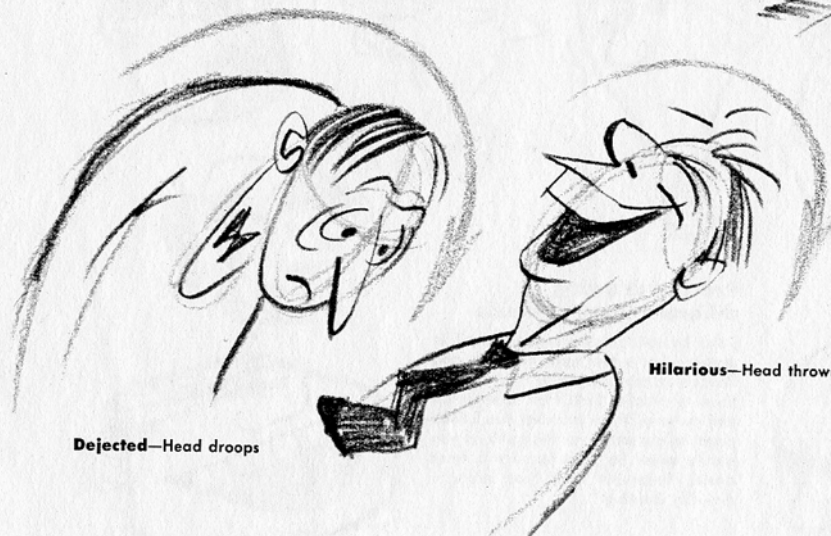
**Angry**—Eyes glaring, teeth bared

## Head gestures

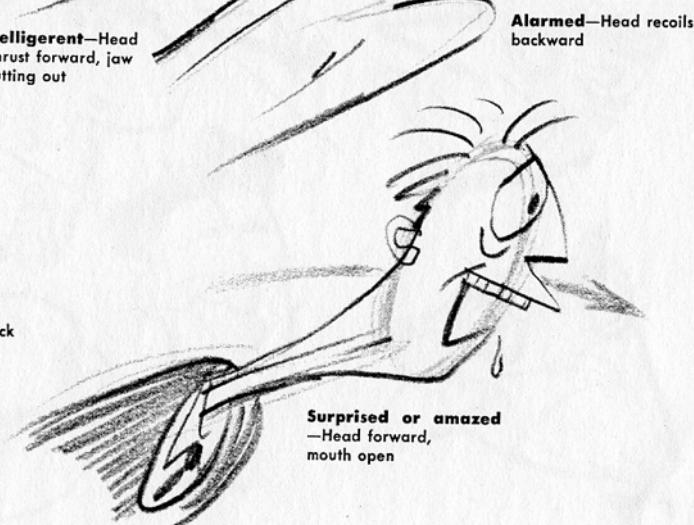
Give the facial expression more punch and drama by drawing the head in an attitude or gesture that matches the emotion expressed by the features. Again, stand in front of a mirror and try out some of the basic expressions. Note how naturally the head takes a position that corresponds to the expression. When you laugh, the head goes back. When you look dejected, it goes down. For nearly every facial expression there is a head gesture. Practice these gestures and apply them in your work.



**Belligerent**—Head thrust forward, jaw jutting out



**Dejected**—Head droops



**Surprised or amazed**—Head forward, mouth open

**Hilarious**—Head thrown back

**Alarmed**—Head recoils backward



## All cartoon characters are based on real people

All cartoon heads, regardless of the style of drawing, are based on real people. To turn a real head into a cartoon head you must do two things: (1) Eliminate detail and (2) exaggerate outstanding characteristics. This enables you to express the feelings and personality of the character clearly and sharply.

To show you what we mean, we had four cartoonists draw their interpretations of three models. Their drawings, ranging from the realistic to the highly stylized, appear below. Note that each man has created a unique and individual cartoon while expressing the type and personality of the model.

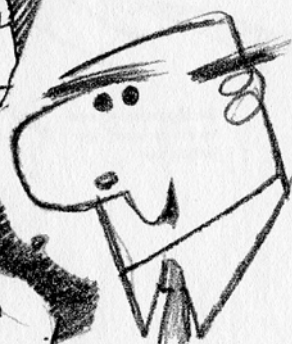


The realistic or adventure-type heads in this column are closest to the live models. Still, much detail has been eliminated

By simplifying the features—particularly the eyes and hair—the heads can be cartooned in a semi-realistic manner

With more exaggeration of the outstanding features and further simplification of outline, the characters become pure cartoons

Even with extreme exaggeration and stylizing, the heads in this column are still essentially the same as those in the first column



### Practice drawing different types of heads

Don't be satisfied to perfect yourself in drawing just a few types of heads and then go on repeating them forever. Continue to practice both from observation and memory. There are over two billion potential characters on this earth, so you should never be at a loss for a fresh model. Remember that "you learn to draw by drawing"





FAMOUS ARTISTS CARTOON COURSE  
Student Work  
Lesson 1

To study and practice

The purpose of this first lesson is to start you drawing the cartoon head in its simplest form, and to teach you how to place the features correctly. The method we give you for locating the features from all views is a sure-fire, time-tested way of creating funny faces. It is basic and it works.

For practice, cover sheets of paper with balloon head shapes and swing those balloons in freely. Use the center and eye lines for locating the features. Strive for new combinations of features and draw the heads from different angles. Carry a pencil and paper with you and have fun with them during odd moments. Keep your eyes open for people around you with unusual features. Using the balloon and guide lines, try to capture those features in their simplest form on your paper: the best cartoon heads are based on observation of real people. Don't copy the heads in the text for these assignments and don't just dash off six heads and rush them to the post office -- practice until you are sure you understand and can use the teaching in the lesson. When you feel you can draw heads upside-down and sideways according to the rules, send your assignments along.

Your work for this lesson will be criticized and graded on the basis of how well you have understood and used the method given for drawing the comic head.

The assignments you are to mail to the School for criticism

ASSIGNMENT 1

On a piece of 8 1/2 x 11-inch bond typewriter paper, draw in pencil four heads about 2 inches high. Draw one each of the following views:

1. Front view of the head of a man or girl
2. Side view of a pretty girl
3. Three-quarter front view of a woman's head tilted slightly forward so that it is looking down
4. Three-quarter front view of a man's head tipped slightly back so that it is looking up

Vary the expressions to suit yourself but make them as lively and animated as possible. Use the balloon with center and eye lines to help you draw them correctly and leave these lines in the drawing (do not erase!) so that we can see you understand their use.

IMPORTANT -- Mark this sheet ASSIGNMENT 1.

ASSIGNMENT 2

On another piece of 8 1/2 x 11-inch bond typewriter paper, create 2 comic heads of men or women of any age and of various shapes, using the principles explained on page 6. Use your ingenuity and imagination, and be sure to let us see the center and eye lines as you did in Assignment 1. Before you make these drawings restudy page 6.

IMPORTANT -- Mark this sheet ASSIGNMENT 2.

Present your assignments in the same clean, professional manner you would use if you were submitting them to the cartoon buyer of a publication. Letter your name, address and student number carefully in the lower left-hand corner of each page. In the lower right corner, place the Lesson Number and Assignment Number. (You should do this with all the assignments you send in.) Mail to:

FAMOUS ARTISTS CARTOON COURSE  
Westport, Connecticut



**Famous Artists Cartoon Course**  
**Westport, Connecticut**

# **The comic figure**

Lesson **2**

**Rube Goldberg**

**Milton Caniff**

**Al Capp**

**Harry Haenigsen**

**Willard Mullin**

**Gurney Williams**

**Dick Cavalli**

**Whitney Darrow, Jr.**

**Virgil Partch**

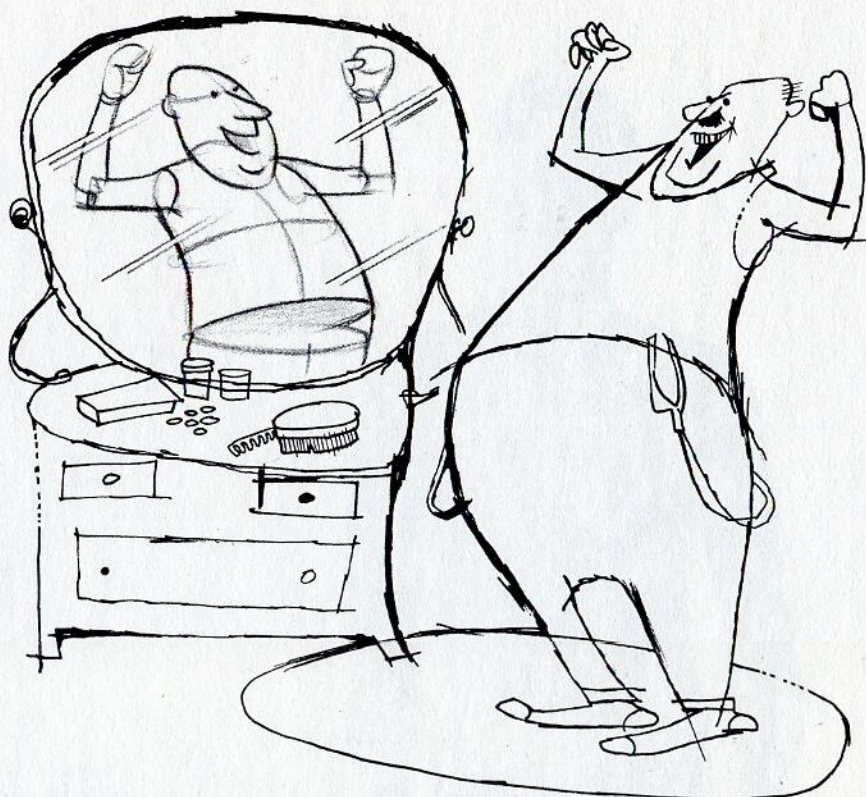
**Barney Tobey**





© Action Rods





## The basic cartoon figure

The human figure is a wonderful structure, made to order for cartoonists. It consists of six basic parts — the head, the torso, two arms and two legs. As a cartoonist, you will not be held to the strict rules of anatomy. You may lengthen, shorten or otherwise distort any part of the figure you please — if it will help you portray the character you are trying to create.

Very few people have perfect figures, and it is by exaggerating the imperfections of the average figure that the cartoonist makes his figures funny. The man who lives next door to you probably gets up every morning and looks with pride at himself in the mirror. In his own eyes he is quite a hunk of man, but you see him as he really is, and would draw him in such a way that — if he saw the drawing — you would have to move out of the neighborhood or meet him out behind the garage. If he has a small potbelly and short arms, you would exaggerate these parts. He wouldn't like it, but the odds are that the rest of the neighborhood would recognize him in the drawing.

So — going behind the physical appearance, you should capture the subject's personality in your drawing. A lazy person, for example, would not be shown standing erect with bulging muscles — he would be drawn stooped over in a wilted position. Nor would a sloppy woman sit on a stool in the same manner as a prim school teacher. This capturing of personality in your characters is very important — just how important you can prove to yourself by studying the work of successful cartoonists.

For the same reasons that we reduced the comic head to a simple balloon in our Lesson 1, in this lesson we will reduce the human anatomy to a simple basic form figure. Because the basic form figure, like the balloon, has depth as well as width and height, it gives you a solid, three-dimensional form to build your cartoon characters on. It keeps them from being flat outlines and enables you to create the illusion of figures that have real bulk and exist in space.

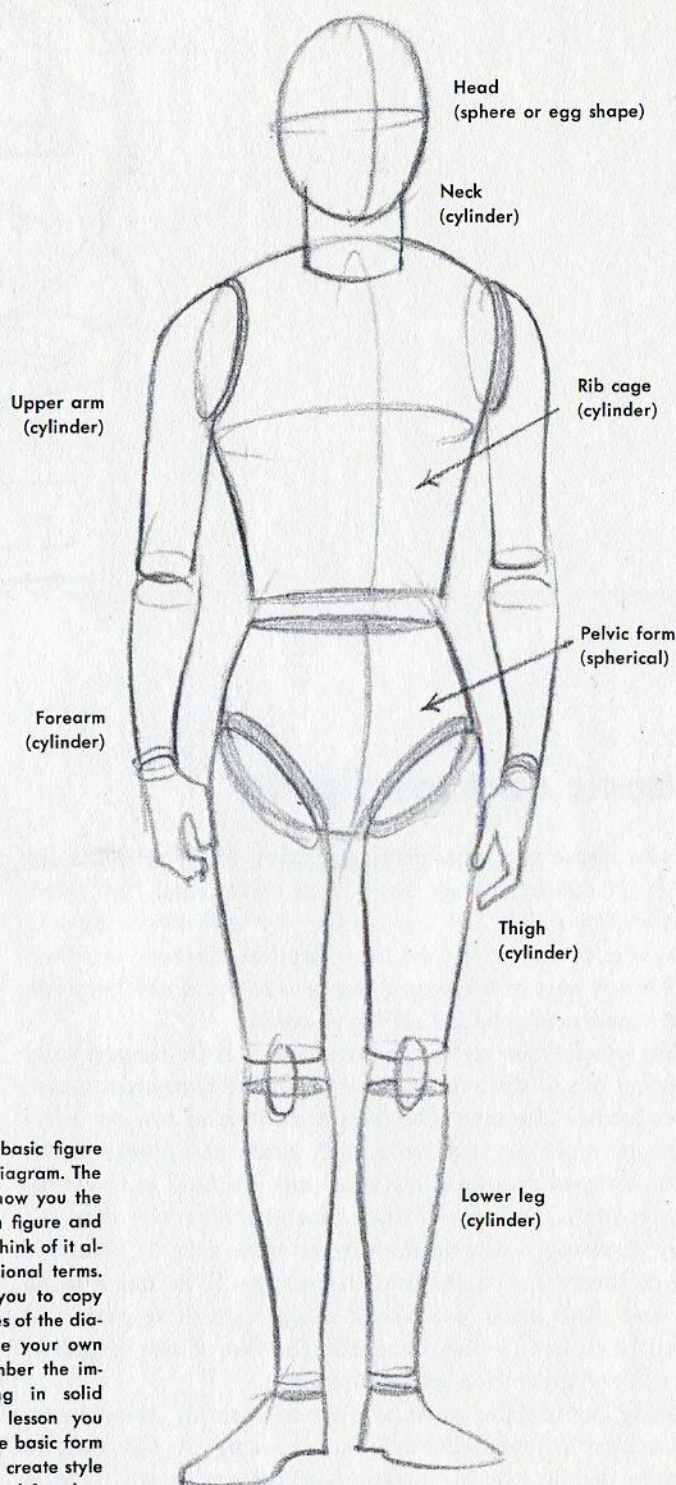
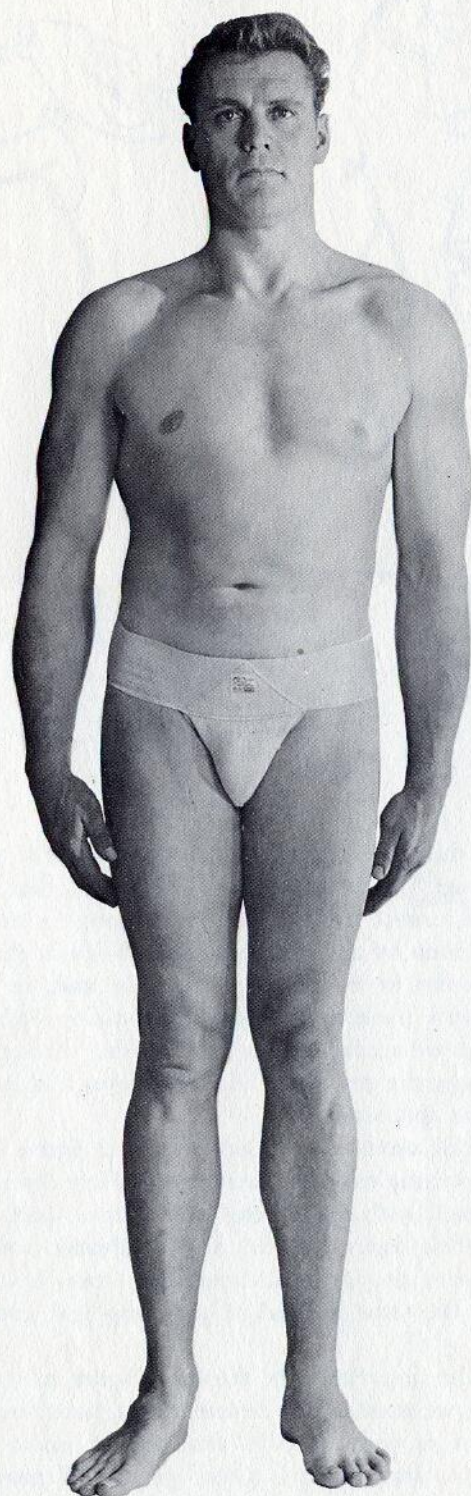
In drawing the basic figure you must construct it solidly by “drawing through” to the other side. This means that you draw the figure as if it were transparent. Even though a shoulder or arm will be hidden by another part of the body in the finished drawing, you must be aware that they exist and, in the basic figure stage, draw them in their correct location. When all of the figure parts are accounted for by “drawing through” in the basic figure stage, the end result will be a figure that is convincing in structure and action.

The wonderful usefulness of the basic form figure is best explained by the examples on the facing page. Here three different cartoonists — each with a different style — have used the basic form to give their figures solidity and believable action. Each has used different proportions, depending upon his style, but each has used the same method of planning and constructing the figure.

Because of the importance of the basic figure to your career as a cartoonist, we want you to devote, throughout your Course, a good portion of your practice time to the mastery of this method of figure drawing. It is a tool which will prove invaluable to you. Once you have a good command of the basic figure, you can draw cartoon characters in any pose you can imagine — walking, running, jumping, squatting, climbing, or standing on their heads — and at the same time be sure that the figure will appear solid and convincing and the pose or gesture true to life. For this reason the study of the basic figure deserves every minute of your time that you can devote to it.

For your practice work and for your assignments for this lesson, you will find the HB or B pencil best to work with. Strive for freedom with your pencil. Avoid tightening up and cramping your hand. Remember, the lines you sketch in freely as you “feel out” the form will many times give you a suggestion or an inspiration for a new and different type of character.





The drawing of the basic figure here is essentially a diagram. The main purpose is to show you the solidity of the human figure and to encourage you to think of it always in three-dimensional terms.

We do not want you to copy the rather precise lines of the diagram when you make your own drawings. Just remember the importance of thinking in solid forms. Later in the lesson you will be shown how the basic form figure is cartooned to create style and action in male and female

### The basic form figure

The basic form figure at the right demonstrates the all-important principle emphasized throughout this lesson — that the human body is made up of simple, solid forms. The basic form figure reduces the body to its essential masses. Every distracting element has been eliminated. Think of the form figure as if it were carved out of heavy wood — it is solid, three-dimensional.

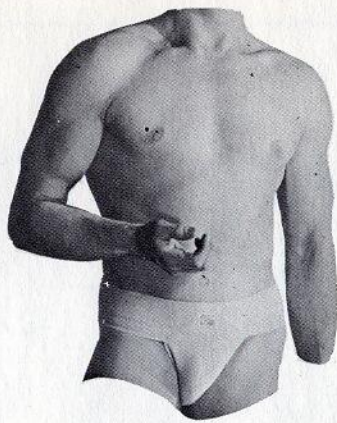
Now compare the form figure with the photograph of the living model to the left. Both are similar in basic construction. In both model and form figure, the neck, the arms and legs, and the rib cage are essentially modified cylinders, while the head is

basically a sphere or egg shape and the pelvis is spherical.

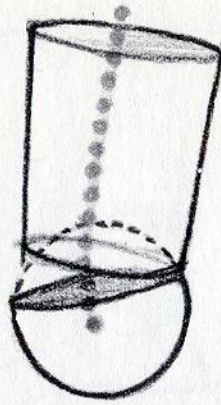
It is extremely important in the beginning to view the body in terms of these simple, basic forms — to understand the essential masses of the separate parts and place these in their proper relationship. In cartooning, you can exaggerate individual parts of the basic form figure to create humorous characters and to give action to the drawing. But regardless of your style of drawing or the exaggeration, you should adhere to the principles of three-dimensional form. With a solid form to build on, the adding of figure details and clothing is greatly simplified.



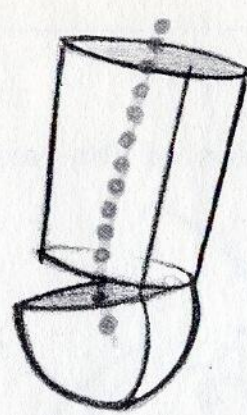
## The torso



The human torso is essentially two forms — rib cage and pelvis — joined together by a flexible spine which permits movement in all directions



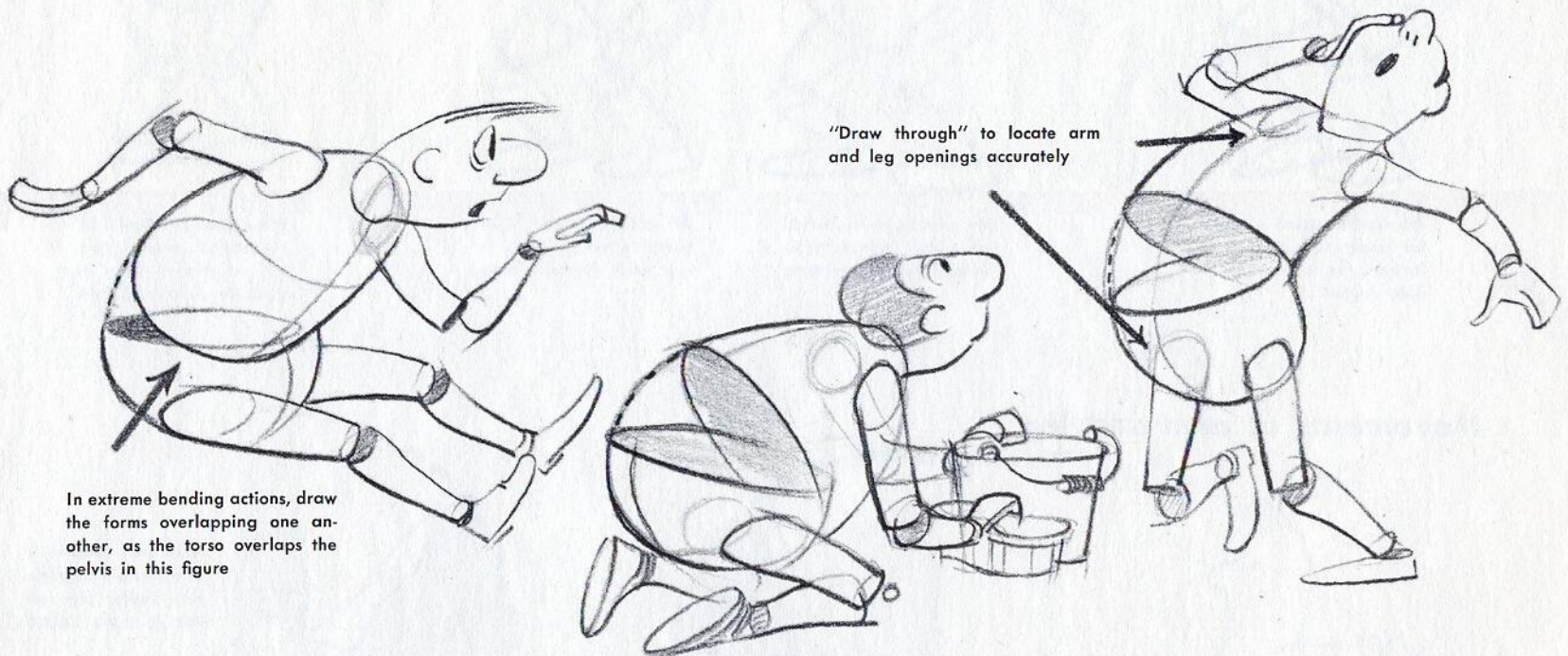
The upper torso is basically a cylinder like a drinking glass. The lower form is more like a sphere cut in half. When the two forms tilt, the spine curves



Center lines on both forms establish the degree to which each form is turned away from dead center (just as the center line on head shows direction it faces)



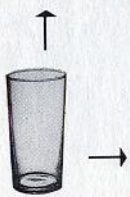
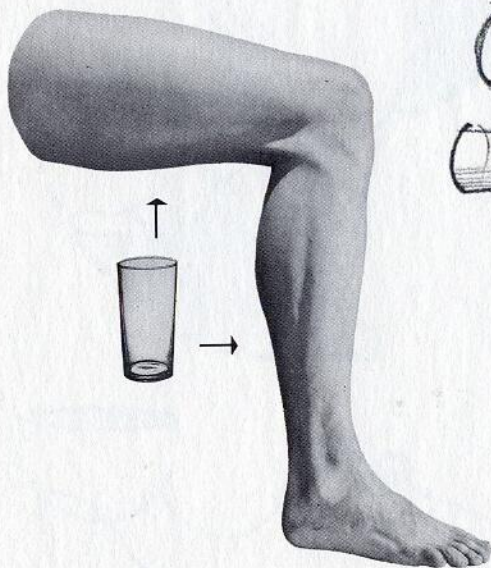
Openings for arms and legs are drawn diagonally across the forms to allow arms and legs to be attached at proper angle



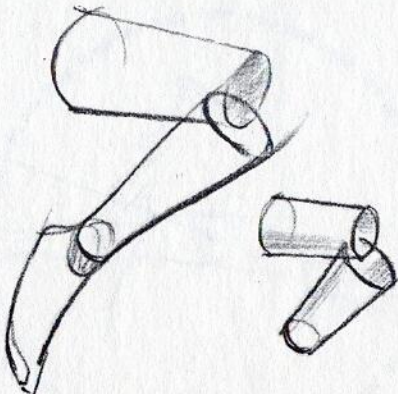
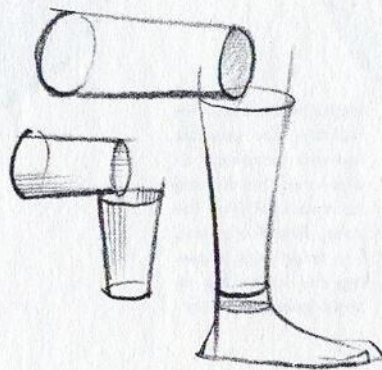
In extreme bending actions, draw the forms overlapping one another, as the torso overlaps the pelvis in this figure

"Draw through" to locate arm and leg openings accurately

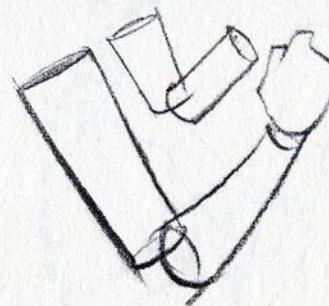
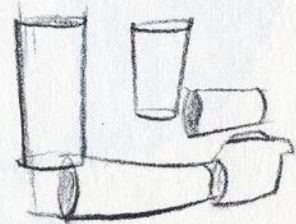
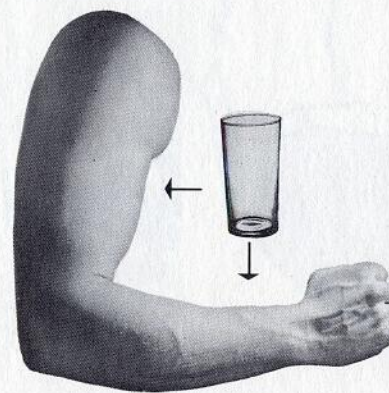
## The leg



Reduced to their basic forms, the upper and lower leg are both modified cylinders about equal in length. Keep in mind the simple drinking glass form



## The arm



The upper and lower arm are also modified cylinders. The chief difference between the arms and legs is that they bend in opposite directions



### Movements of rib-cage section of the torso



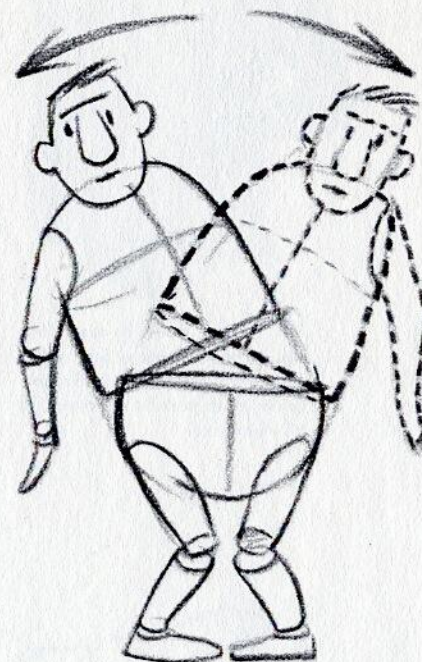
The flexible spine allows the upper torso to bend forward to a considerable degree



While the figure can bend backward, movement is limited in average person

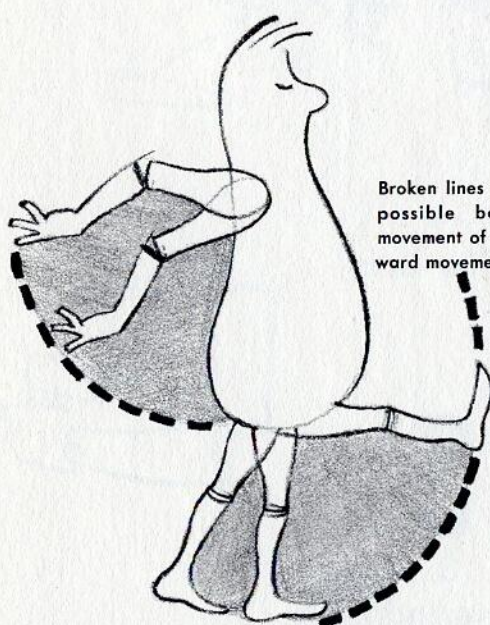


Rib cage can twist sideways to left or right in relation to the pelvic form

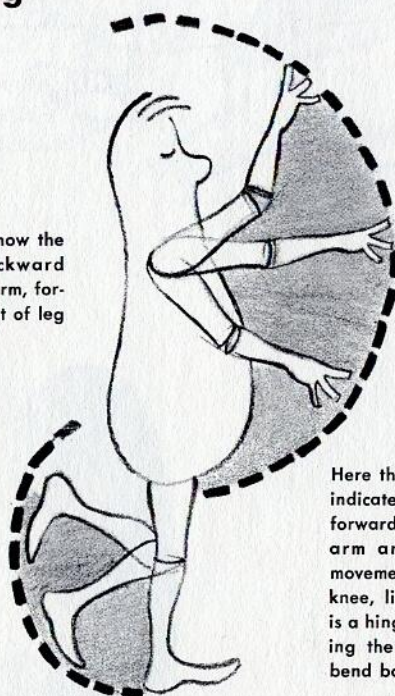


It can bend to either side. Try these movements yourself or observe them in others to understand them

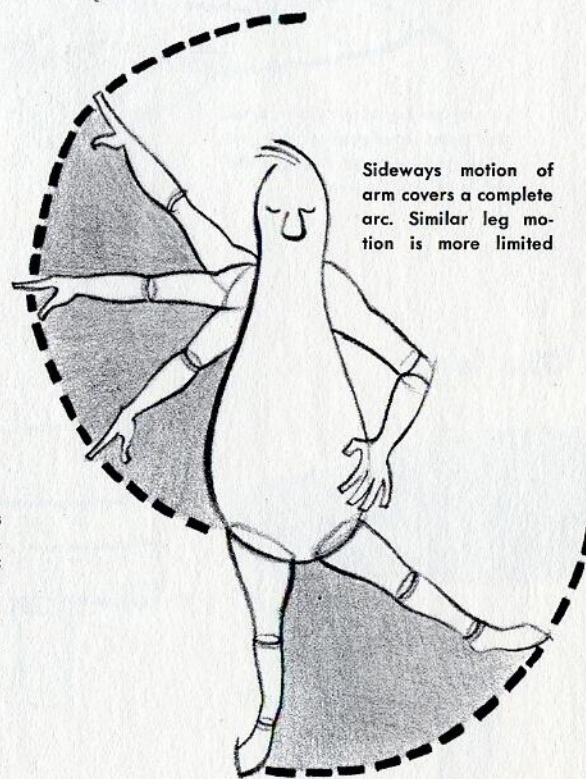
### Movements of arm and leg



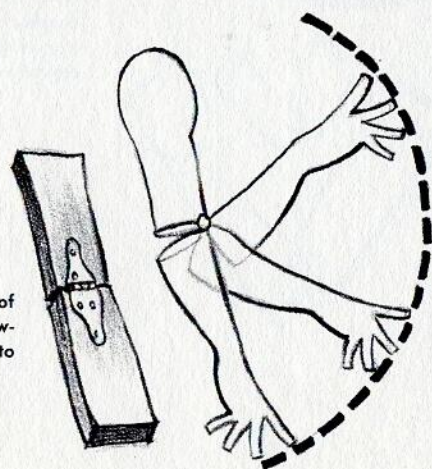
Broken lines show the possible backward movement of arm, forward movement of leg



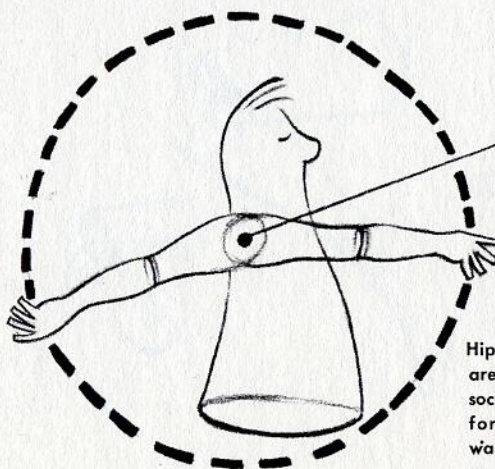
Here the broken lines indicate the possible forward movement of arm and backward movement of leg. The knee, like the elbow, is a hinge joint, allowing the lower leg to bend backward only



Sideways motion of arm covers a complete arc. Similar leg motion is more limited



The elbow joint is of the hinge type, allowing the forearm to bend forward only



Hip and shoulder joints are of the ball-and-socket type, allowing forward and backward as well as rotary motion

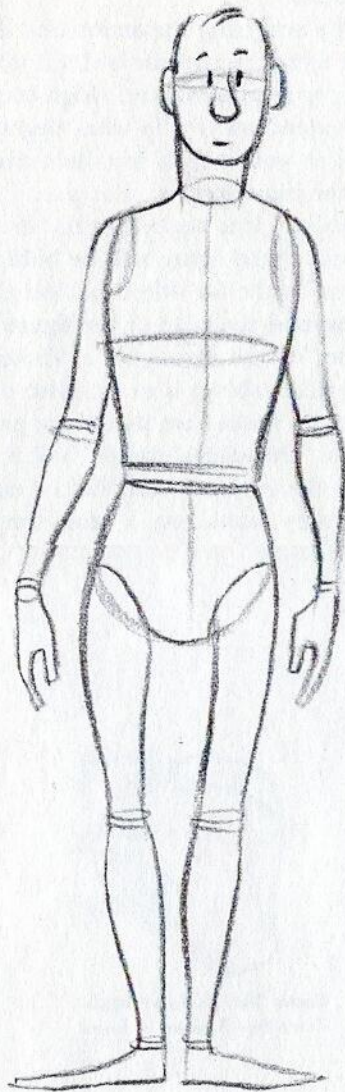




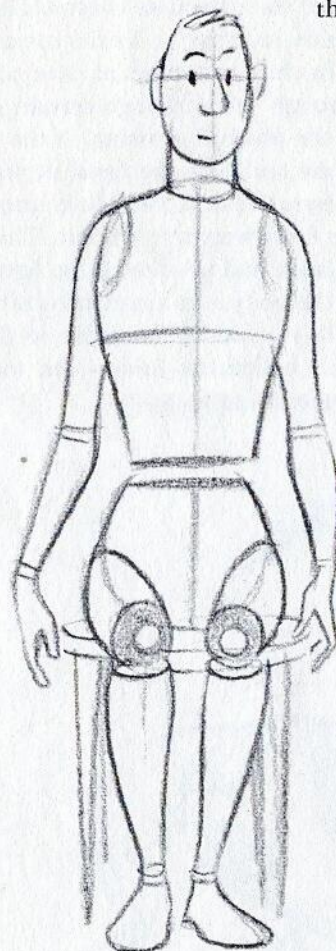
## Foreshortening

When you view an object from one angle, you may see it at its full length. View it from a different angle, however, and it appears to become much shorter than it actually is. For instance, a cylinder held crosswise in front of you might have an actual length of twelve inches, but turn that same cylinder so that it points toward you and its over-all length appears greatly reduced. This is known as foreshortening.

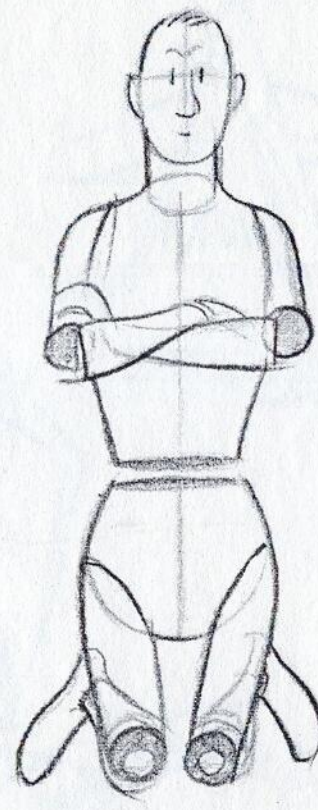
The careful use of foreshortening will help you give your figures a convincing feeling of three-dimensional form. Whether your figures are merely sitting or are engaged in some violent action, foreshortening will really make them seem to exist in depth.



Here a figure is drawn so that each individual form is seen at its actual length. Even the feet are turned sideways so that their length is evident



Seat this same figure with feet turned toward the viewer and the thighs and feet appear to become relatively short. The other forms still retain their original length



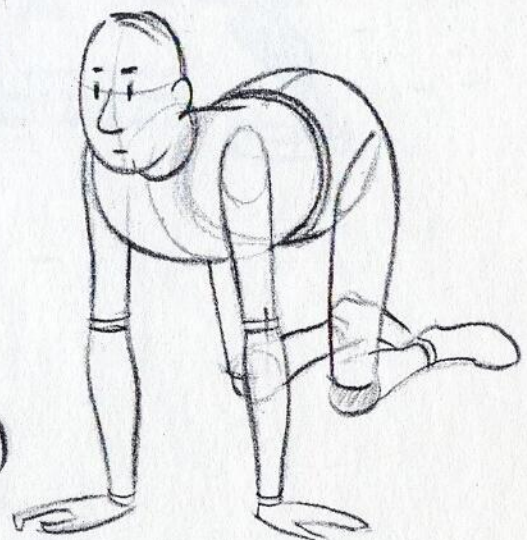
Here the forearms are full length, but the upper arms, projecting toward you, seem short. The thighs come forward at an angle, look shorter than in standing figure



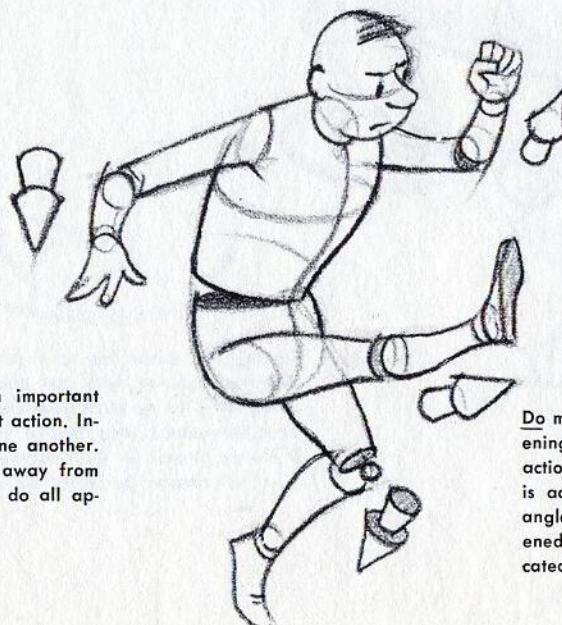
Here is a cylinder seen at its full length



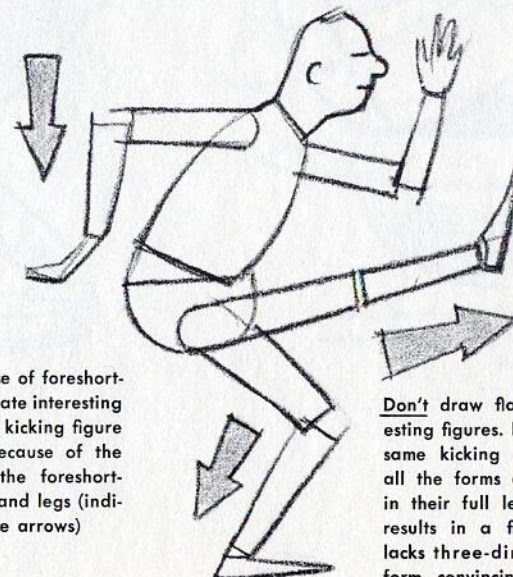
The same cylinder, turned so one end comes into view, now seems only half as long



In this position the figure seems shorter since the torso is drawn in a greatly foreshortened pose. The lower legs, angled back, also are decisively foreshortened



Foreshortening plays an important part in expressing violent action. Individual forms overlap one another. They extend toward or away from the viewer. Very seldom do all appear in their full length



Do make use of foreshortening to create interesting action. This kicking figure is active because of the angles of the foreshortened arms and legs (indicated by the arrows)

Don't draw flat, uninteresting figures. Here is the same kicking action but all the forms are drawn in their full length. This results in a figure that lacks three-dimensional form, convincing action

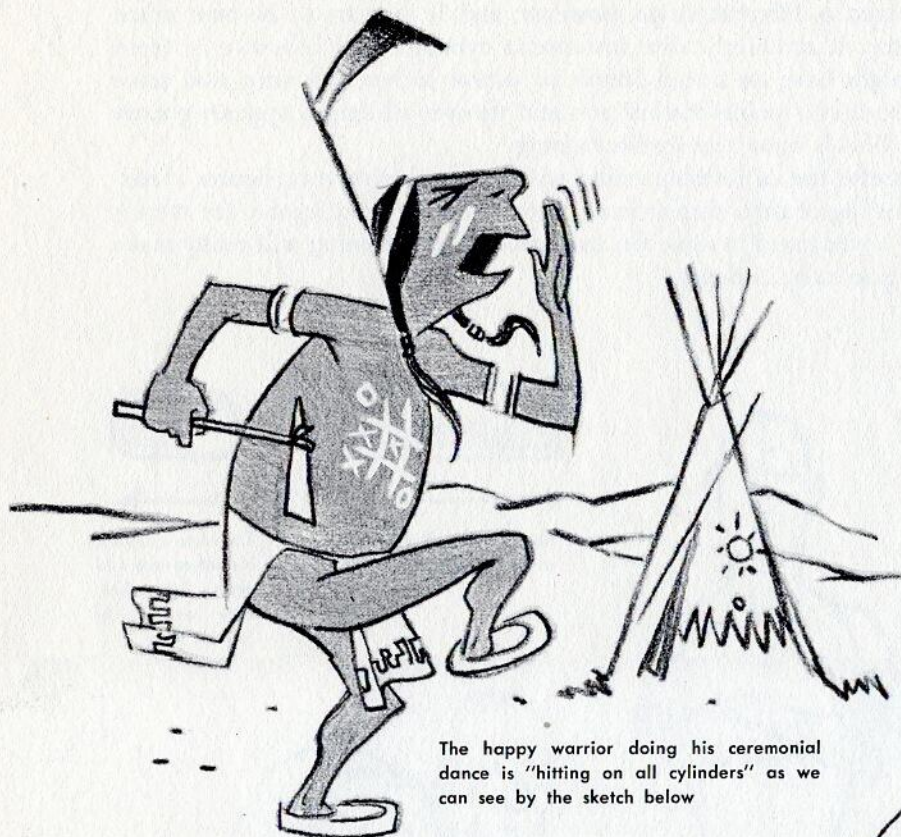


## The basic forms in action

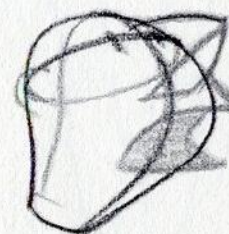
Because the cylinder and sphere are three-dimensional forms, they work perfectly in helping you establish the action and direction of the individual parts of the figure and of the figure as a whole. Just as we used the center line in Lesson 1 to "turn" the comic head, we can use a center line on the torso to help us turn the body in the proper direction.

When you draw a figure, start by analyzing the action and determining in which direction the figure and its individual parts must go. Ask yourself: Do the upper arm, torso, and thigh come toward me? Do the upper arms extend away? To what degree? Once the direction is established in your mind, foreshortening is easy to arrive at by the use of the basic form of that part.

In the early stages of your penciling, it is important to "draw through" even though certain parts of the figure will be hidden in the finished drawing. If the arm on the far side is behind the figure and only the hand shows beyond the edge of the figure it is essential that the whole arm be "drawn through," as though the body were transparent. This will enable you to establish the balance and solidity of the figure and make sure that every part of the body is in a natural position. "Drawing through" will also help you clothe the figure so that the garments will fall in normal, believable folds—the way they would on a real, three-dimensional figure.

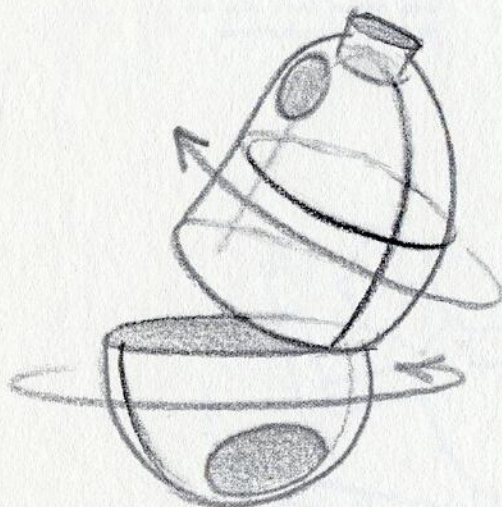


The happy warrior doing his ceremonial dance is "hitting on all cylinders" as we can see by the sketch below



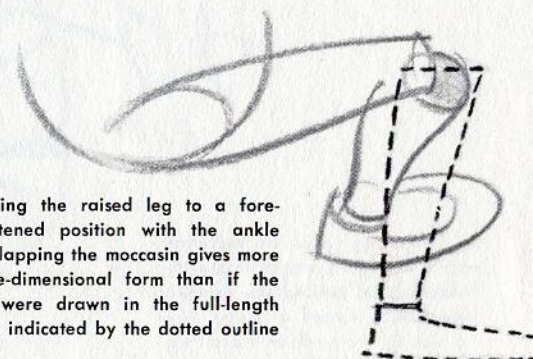
Center line on head establishes the direction it faces

To emphasize the definitely solid form of the figure, we have drawn the individual forms of this Indian much more precisely than we would in making the average basic figure drawing. A sketchier, more casual handling, as illustrated on the following page, is better at this stage.

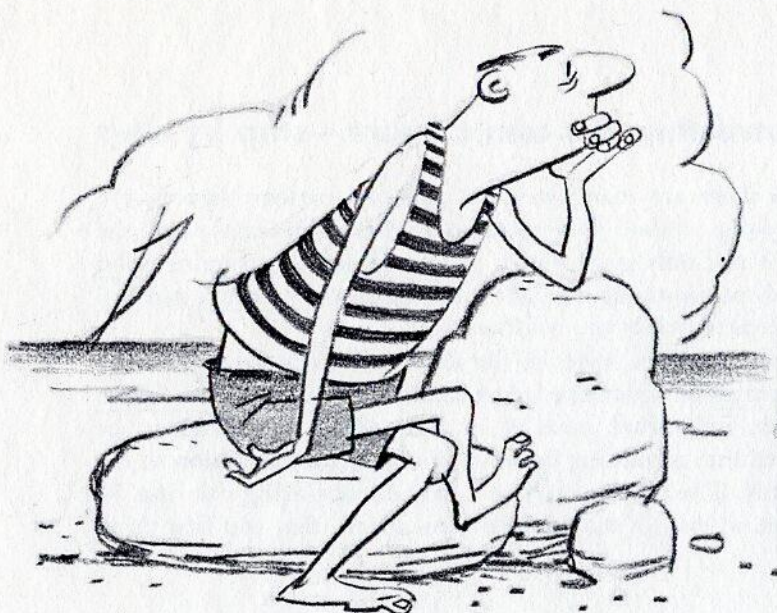


Center line on torso forms establishes the direction and degree to which they are turned

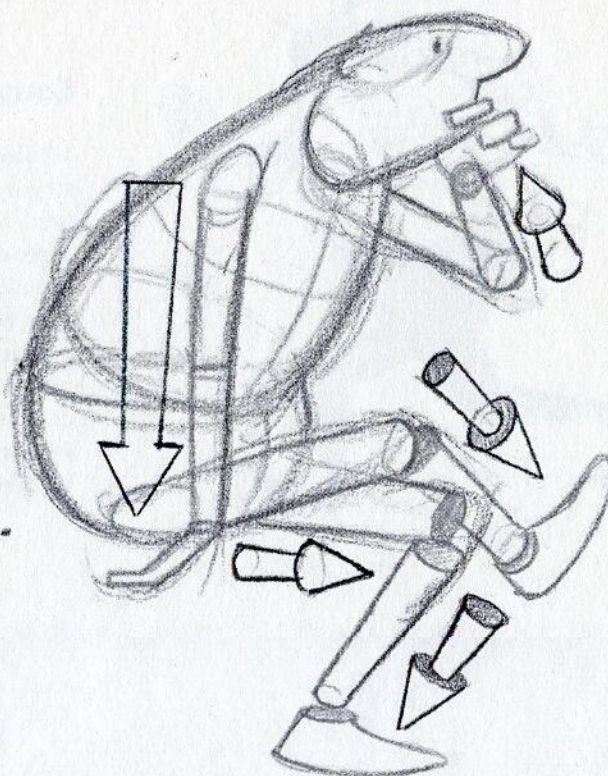
Turning the raised leg to a foreshortened position with the ankle overlapping the moccasin gives more three-dimensional form than if the leg were drawn in the full-length view indicated by the dotted outline



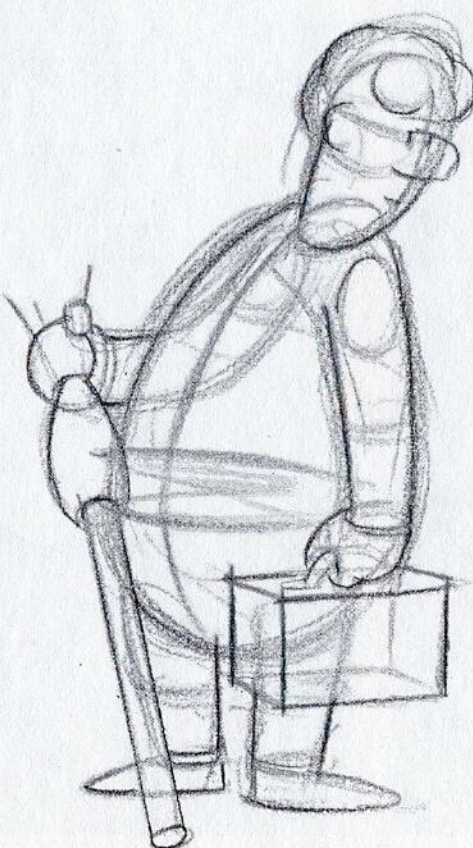




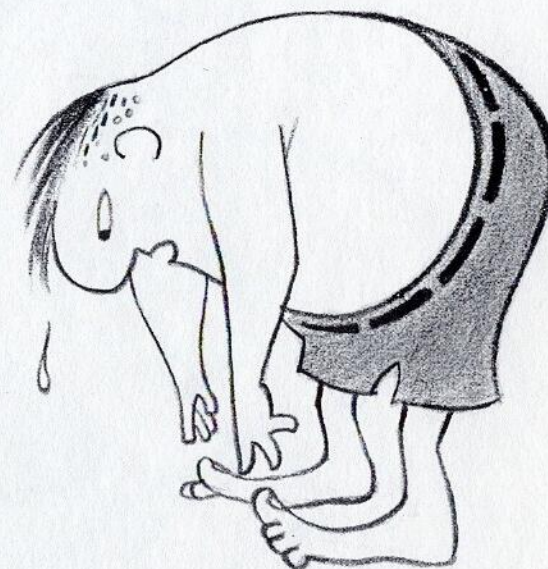
Differences in the direction and angle of the individual parts of the figure above can best be established by the use of the cylinder forms. These differences go a long way toward creating interesting and convincing action



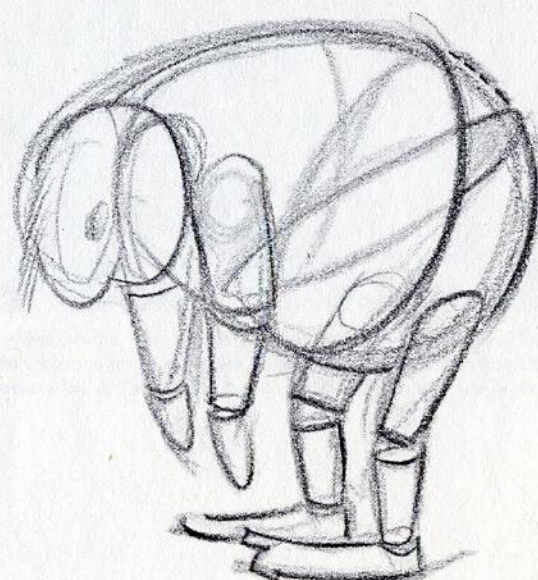
Note that some of the forms come forward — others go back



See how the "drawing through" has been used in these figures to locate the body parts properly. Even though an arm or leg will be only partly visible in the finished inked drawing, it should be penciled in completely if you want it to look right



Figures can assume some odd poses, but, no matter how unusual the action, you will find the basic figure method of construction invaluable in planning and drawing it





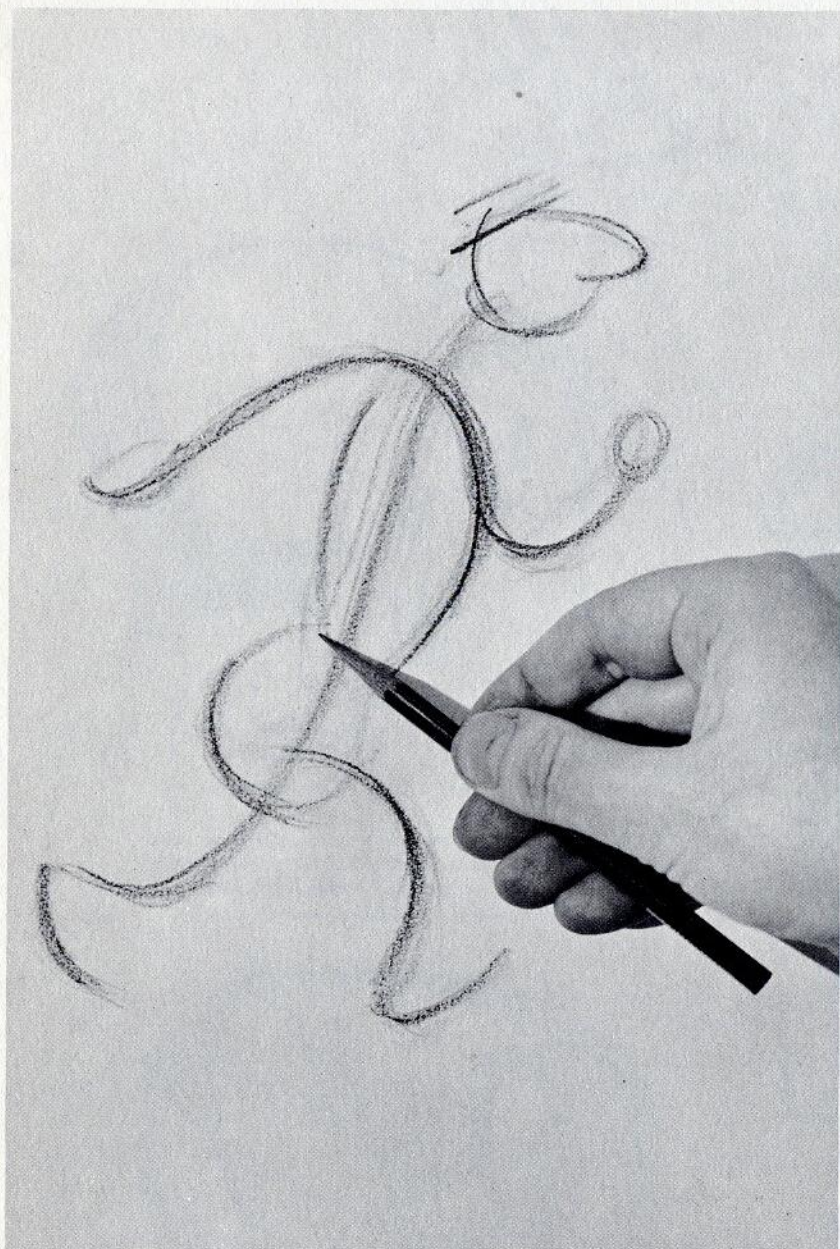


The finished figure

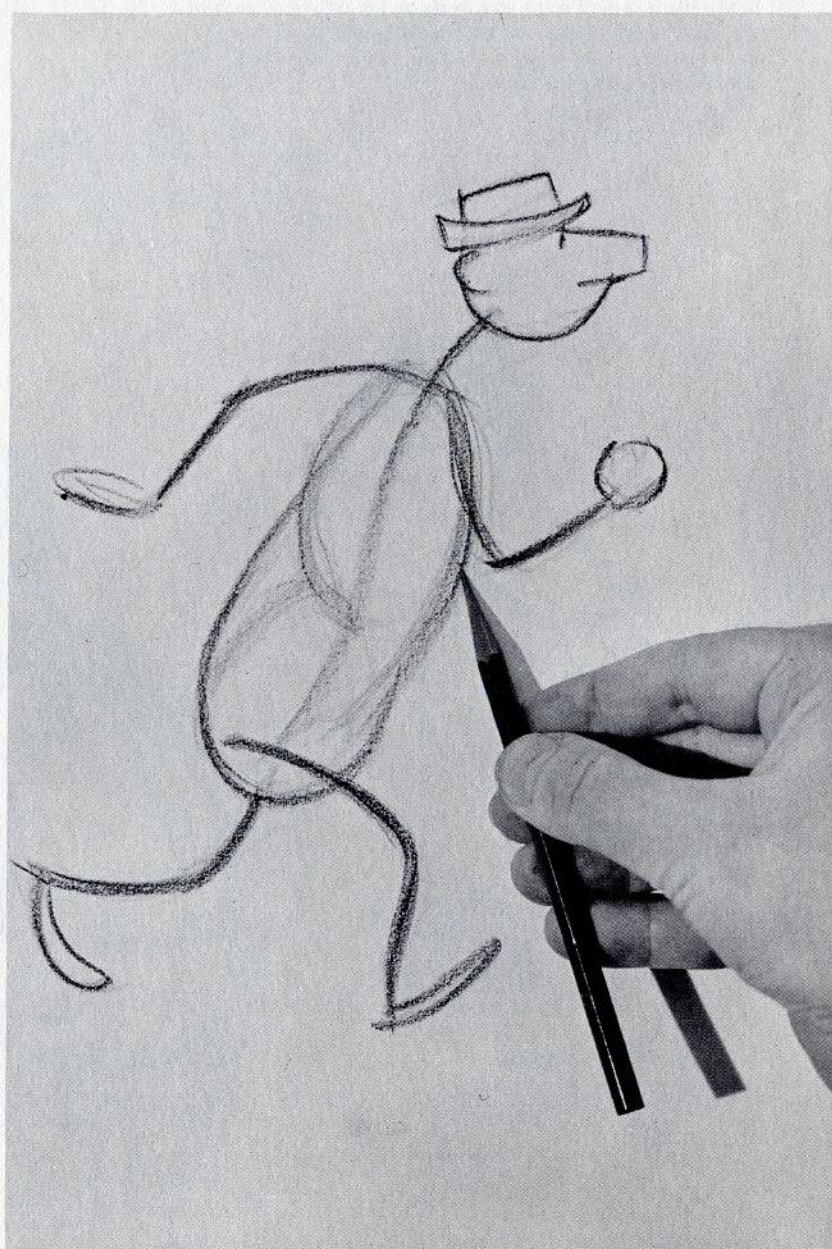
### Constructing the comic figure—step by step

While there are many ways to construct cartoon figures, the step-by-step method demonstrated on these pages is, we feel, the best. It not only gives you a procedure for constructing solid three-dimensional figures, but it also helps you to think and feel the character while you construct it.

It is in the first stages of the drawing of any figure that the action must be determined. Any action involves the whole figure, not just individual parts of it. A standing figure cannot be changed into a running figure by giving a running action to the legs only. The result would be a stiff, unconvincing drawing. So be sure, when you start to draw any action, that you first think



- 1 Once you have determined the type of character and action, swing in the general form lightly. Hold the pencil as shown—using your arm or wrist rather than finger movement—and establish the action in a “stick figure” or gesture-action sketch

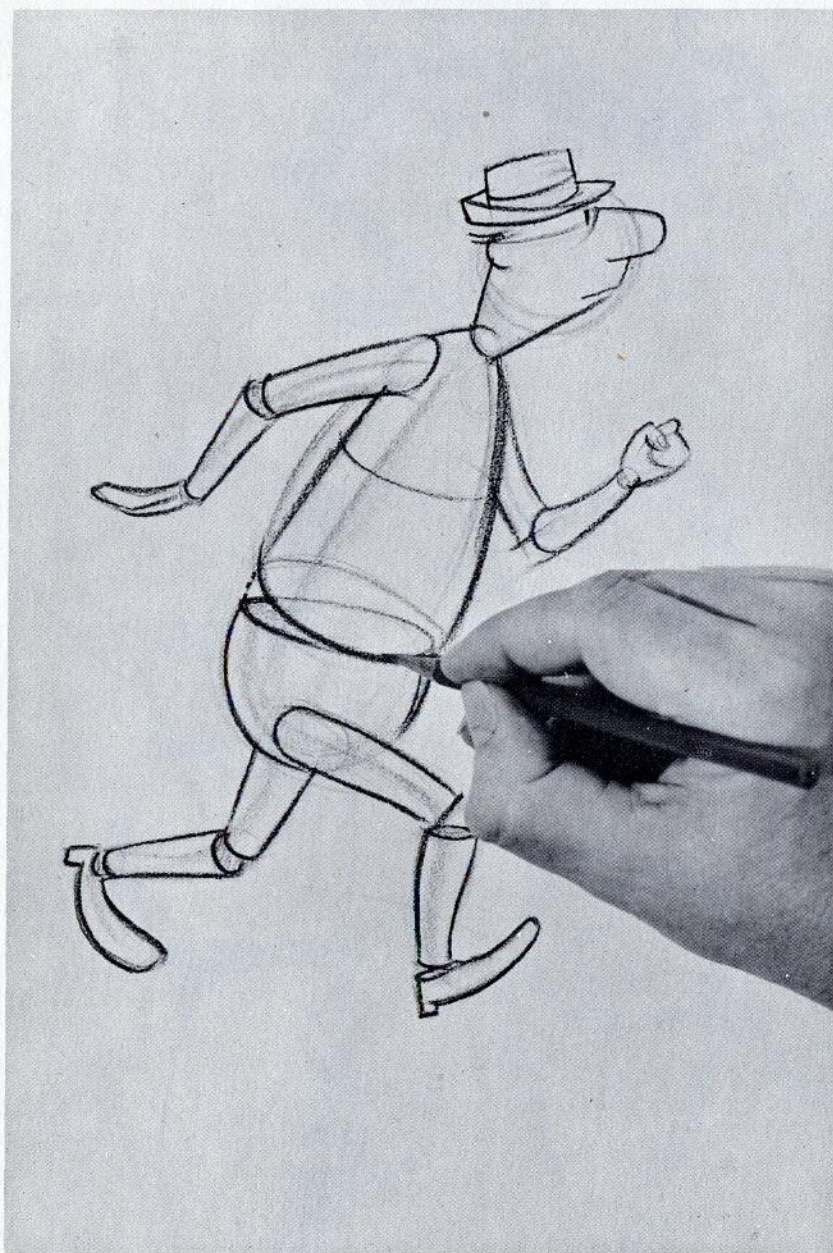


- 2 Still holding the pencil as shown (especially if the figure is of fairly good size), indicate the action of arms, hands, legs, and feet more specifically. This will give you an accurate basis for building the solid forms in the next step

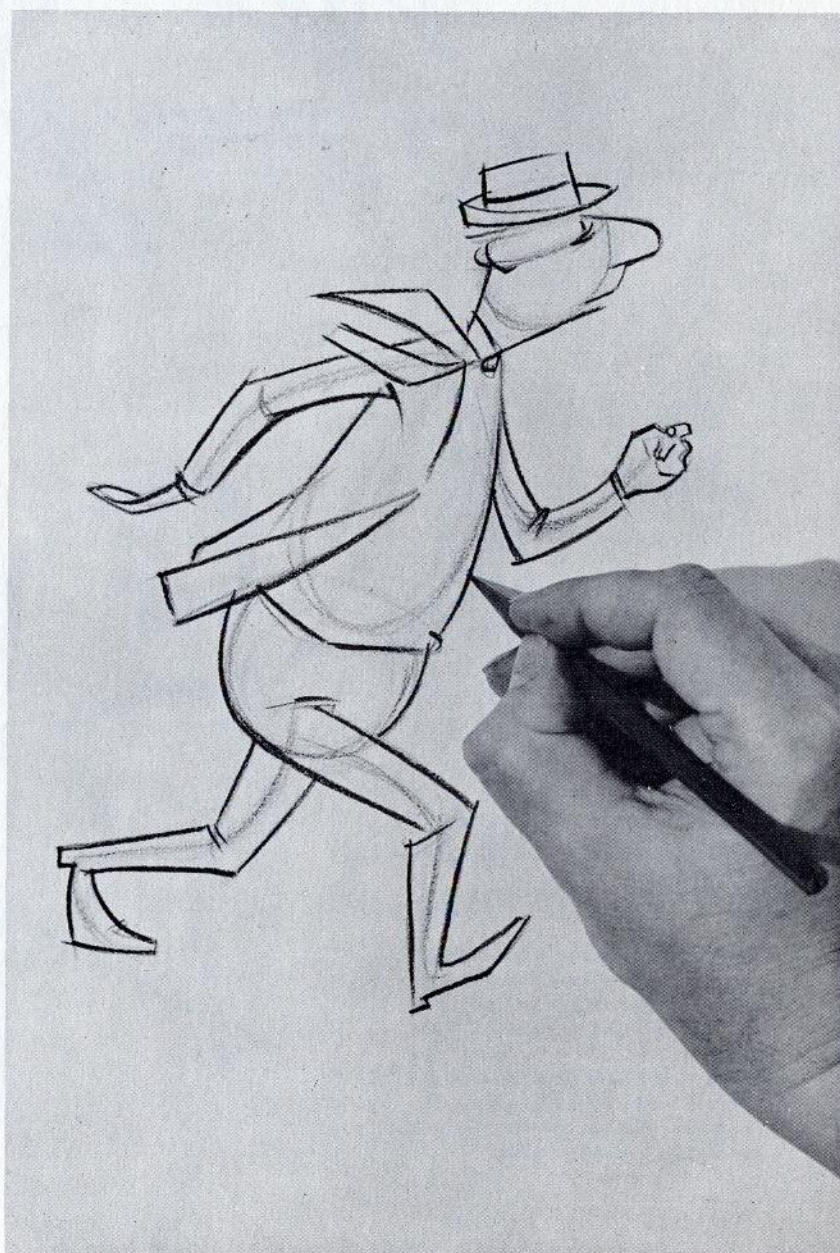


it out carefully and then, from the very first sketch, show the action in the figure as a whole.

Action and character are inseparable. As you think out the action of the character, you must also feel his emotional makeup and how it is reflected in the action. There is no substitute for knowing and understanding the kind and type of people you are drawing. Any cartoonist can draw a sloppy fat man, but the cartoonist who can make the reader feel the emotional sloppiness of the character above and beyond the physical messiness of dress is the one who gets the jobs with the big fat pay checks.



**3** Draw in the solid forms. These help you give dimension to the loose shapes you sketched in "feeling out" your cartoon. At this stage you may find you have more control of the pencil if you hold it as you would in writing



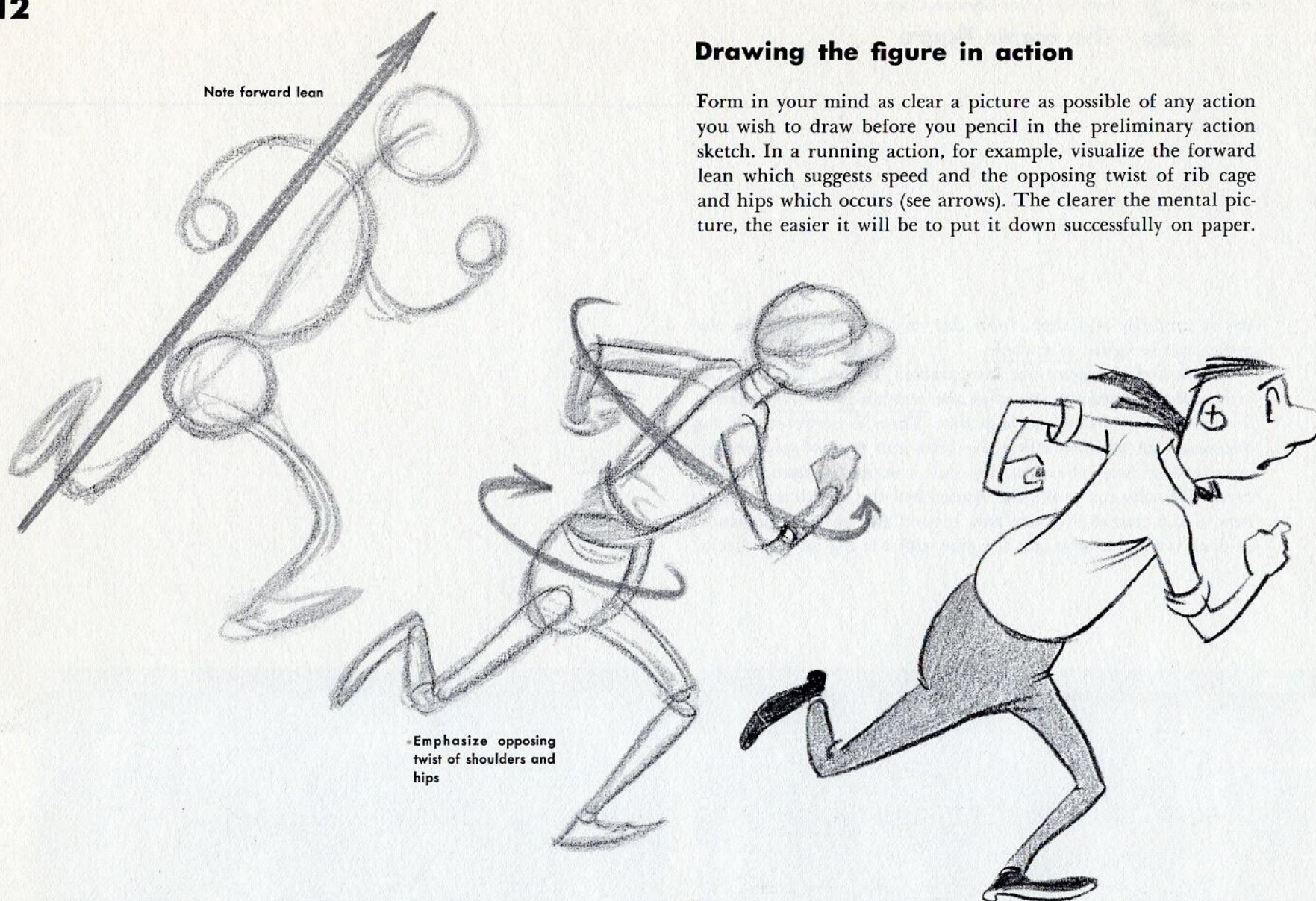
**4** Now that the figure has been solidly constructed, you have a sound basis for drawing the clothing on it and developing your character. Keep in mind that the clothing should follow and reveal the solid figure underneath



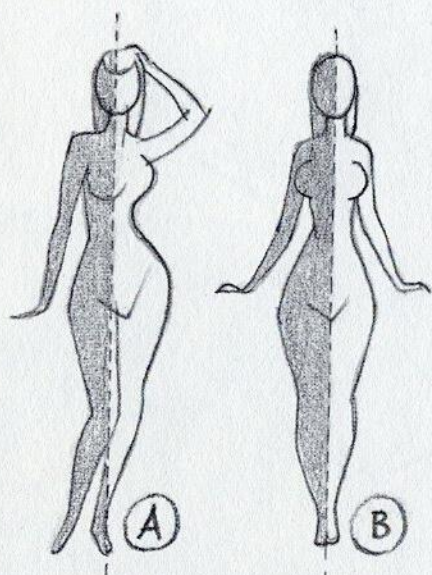
Note forward lean

## Drawing the figure in action

Form in your mind as clear a picture as possible of any action you wish to draw before you pencil in the preliminary action sketch. In a running action, for example, visualize the forward lean which suggests speed and the opposing twist of rib cage and hips which occurs (see arrows). The clearer the mental picture, the easier it will be to put it down successfully on paper.



Emphasize opposing twist of shoulders and hips

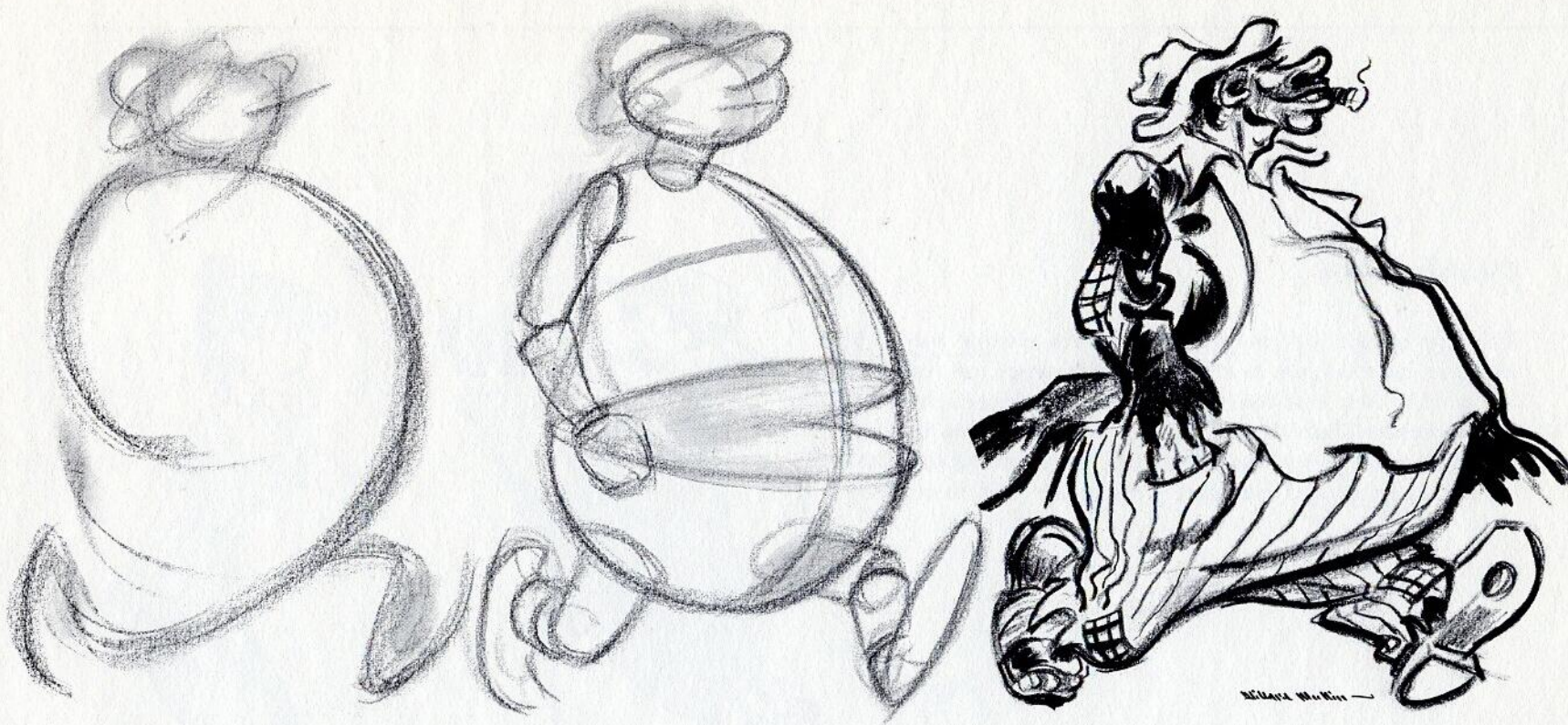


When you draw figures in a direct front view, make them more interesting by getting variety into the action of arms and legs. In Figure A the shape of the figure on one side of the center line differs considerably from that on the other. In Figure B the two halves of the figure are identical, creating a rather monotonous, repetitious effect

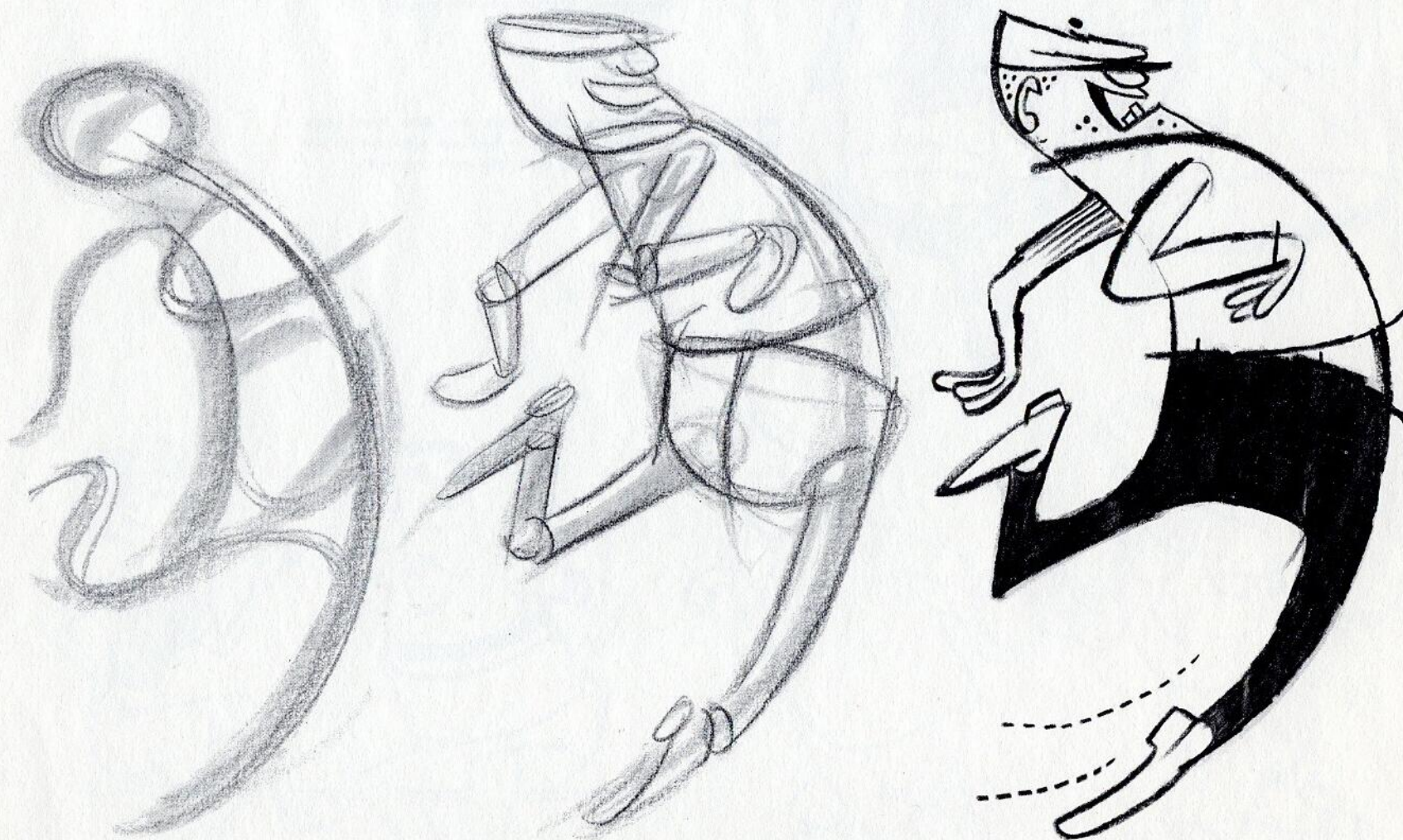
Even in static standing poses the figure can be given interesting action. For instance, when the weight of the figure is on one leg, the hip on that side tends to rise and the shoulder drops. The resulting opposite slant of shoulders and hips creates a feeling of animation







No matter what type of clothing you intend to give your finished figure — tight or loose fitting, stylish garb or ragged hand-me-downs — you will find that the more accurately you construct the basic figure and its action in the second stage of your drawing, the easier it will be to drape the clothing on it correctly

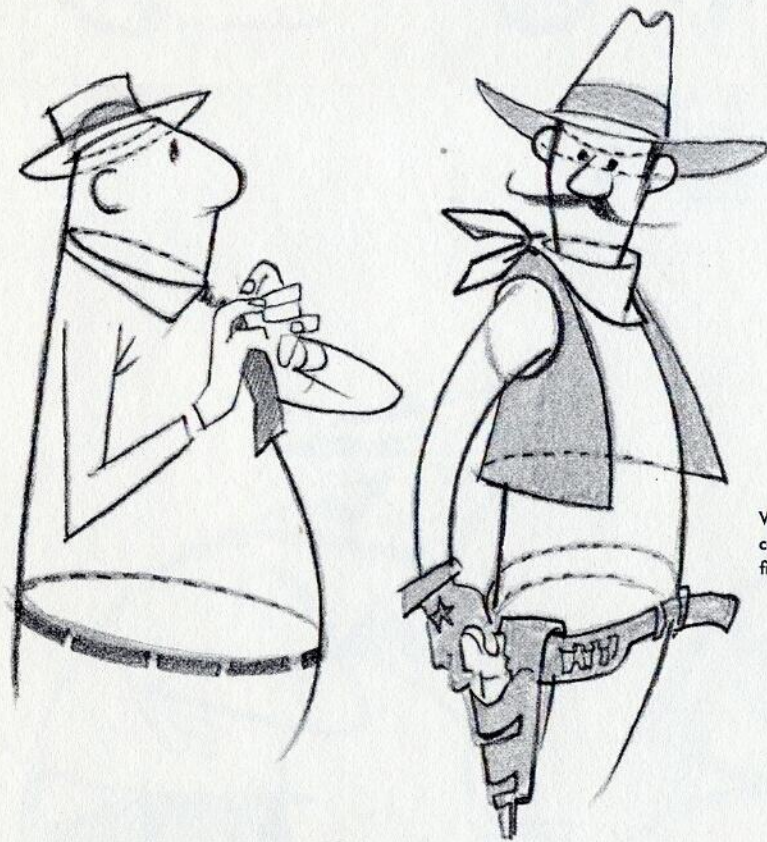


The emphasis in much of contemporary cartooning is on pattern or shape rather than solid three-dimensional form — but the same planning and procedure can be followed to create an active though stylized figure



### Clothing tips

The type of clothing you give your figures and the way it fits will play the final part in creating specific types and characters and making them look convincingly solid and three-dimensional. The suggestions listed below will prove helpful to you in giving your figures the professional touch. Always remember that clothing should go around the figure — reveal the form underneath.



Pay attention to current styles of men's, women's and children's clothing. Unless there is a particular reason for doing so, don't dress your characters in out-of-date duds

When you pencil in hats, collars, belts, etc., draw them going completely around the figure. It will help give dimension to the figures and make the clothing itself look more convincing



Be careful to give the proper curvature to sleeve and trouser cuffs, bracelets, socks, etc.

Any pattern or design on clothing should be carefully drawn to follow the contours of the figure underneath



FAMOUS ARTISTS CARTOON COURSE  
Student Work  
Lesson 2

To study and practice

This lesson is designed to let you in on the ground floor of how to draw active, solid, simple cartoon figures. You learn to set up their action and general proportions by using gesture-action sketches as a foundation for solidly drawn figures. Then, when you add simple clothing, your characters look right because you planned them that way.

For practice, draw many simple figures in every conceivable pose. Check your method by referring often to the text. Have fun with these drawings. Make a point of creating actions in which some of the forms are foreshortened.

Your grade on this lesson will be based on your understanding and use of the gesture-action figure shown on page 10 of the text, as well as on how you draw the basic and completed figures. There are three assignments for this lesson, and they are to be done in pencil only.

The assignments you are to mail to the School for criticism

ASSIGNMENT 1

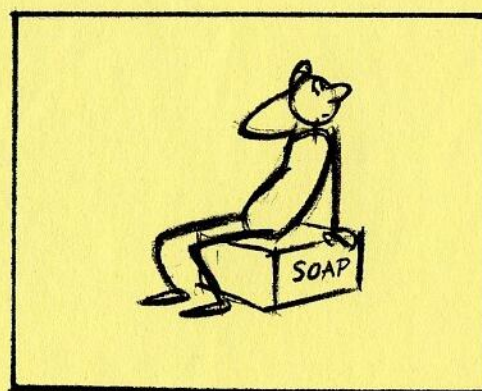
On a sheet of 8-1/2 x 11-inch bond typewriter paper, plot out two gesture-action sketches similar to those on page 10 of the text. These sketches should merely establish the size, general proportions and actions of the figures described below. Make these figures large on the paper -- about 5 inches from head to foot.

- A. Side view of a fat man walking hurriedly toward the left-hand side of the page.
- B. 3/4 front view of a man hanging by his hands from a tree branch. Try to make your sketch show that the man is hanging in midair, his weight supported by the arms as he clings to the branch.

IMPORTANT -- Mark this sheet ASSIGNMENT 1.

ASSIGNMENT 2

On a sheet of 8-1/2 x 11-inch bond typewriter paper and using the gesture-action sketch at the right as a guide, draw the basic form figure of a seated man about 5-1/2 inches high. Your drawing should be similar to those on page 2 or at the top of page 6. The left arm supports the figure, which leans back slightly. Head and torso are twisted as he looks back over his shoulder with a puzzled or surprised expression. The right hand is raised to his head to emphasize this attitude of surprise.



IMPORTANT -- Mark this sheet ASSIGNMENT 2.

ASSIGNMENT 3

On a third sheet of 8-1/2 x 11-inch bond typewriter paper, draw a complete, clothed figure, using either of the two figures you drew for Assignment 1. Follow the procedure outlined on pages 10 and 11 of the text. This figure should be the same size as your gesture-action drawing in Assignment 1.

IMPORTANT -- Mark this sheet ASSIGNMENT 3.

Present your assignments in the same clean, professional manner you would use if you were submitting them to the cartoon buyer of a publication. Letter your name, address and student number carefully in the lower left-hand corner of each page. In the lower right corner, place the Lesson Number and Assignment Number. Mail to:

FAMOUS ARTISTS CARTOON COURSE  
Westport, Connecticut

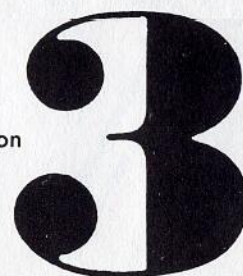


**Famous Artists Cartoon Course**

**Westport, Connecticut**

# **Inking the head and figure**

Lesson



**Rube Goldberg**

**Milton Caniff**

**Al Capp**

**Harry Haenigsen**

**Willard Mullin**

**Gurney Williams**

**Dick Cavalli**

**Whitney Darrow, Jr.**

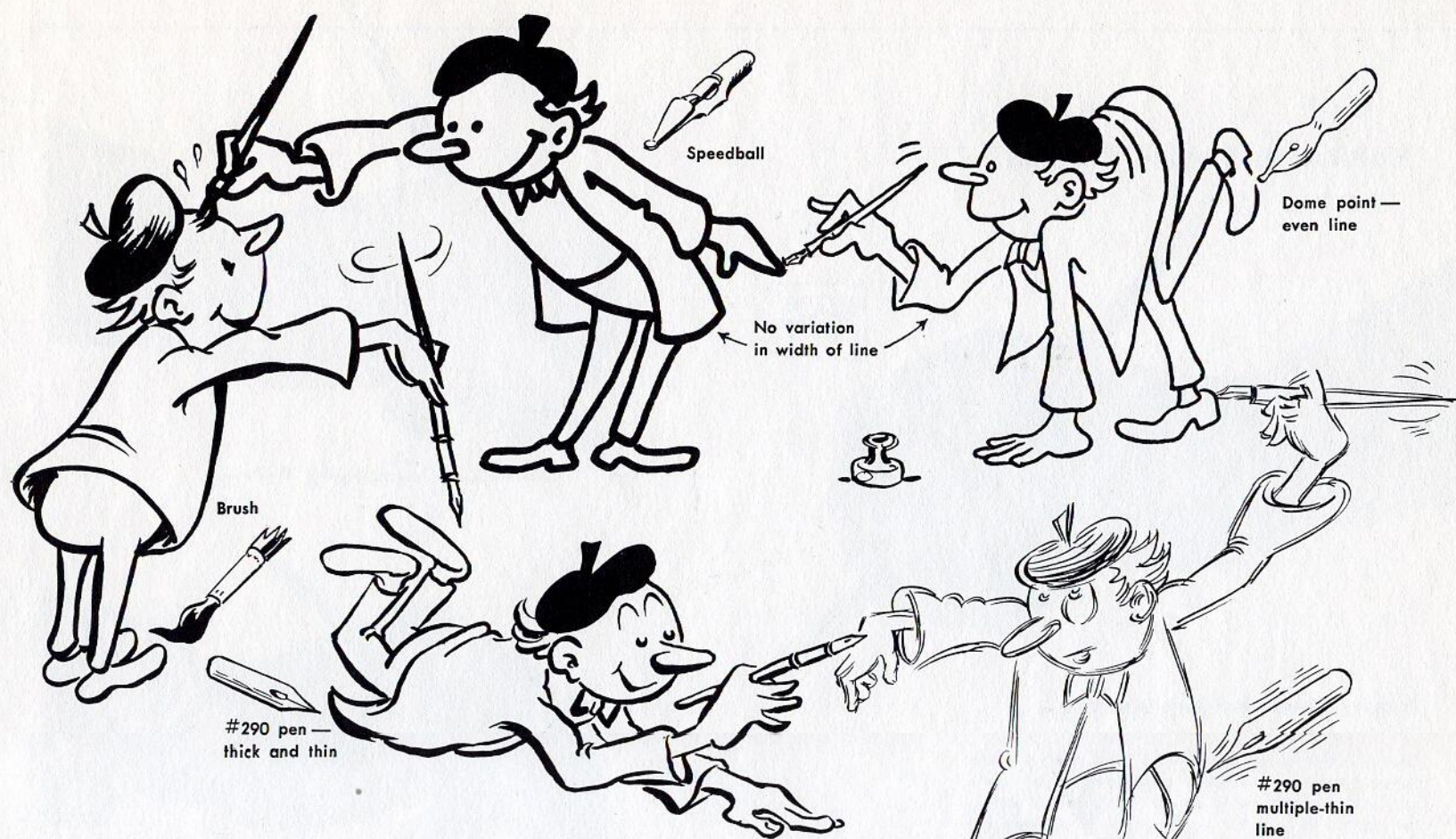
**Virgil Partch**

**Barney Tobey**









## Inking the head and figure

Up to this time you have been working in pencil only. Now it is time to start working and practicing with pen and ink. Nearly all newspaper and most magazine cartoons are drawn in ink, so as soon as possible you must learn to master those most useful and versatile tools — the pen and the brush. The great joy of inking with pen or brush is the clean effect you achieve. At first you will feel like throwing the bottle of ink through the window as you blot and scratch your way through page after page of inking. But — your blots will pay off in experience, and you will be drawing nice clean lines even before you know it. In no other phase of cartooning does practice pay off so rapidly.

Right from the start, work out a system for inking the figure. By system we mean the order of inking the individual parts that make up the figure. A system for inking has the great advantage of speed. If you were to ink the feet first, you would have to wait for them to dry before you could go on with the rest of the figure. Also, by always inking the parts of a figure in the same order (preferably from top to bottom) you will find there is much less chance of forgetting to ink some part.

You may be interested primarily in brush work, but you should also do these exercises in pen. If you master the pen, the brush will be no problem. Anything you can do with a pen you can do with a brush.

Remember that for pen work you will need a smooth or high surface board or paper to draw on. Use a good black waterproof drawing ink and a Gillott 170 or comparable pen point. Never be careless about materials. It will show in your work. You wouldn't want your dentist to use a carpenter's auger on your teeth. Use the proper tools to get the proper effect.

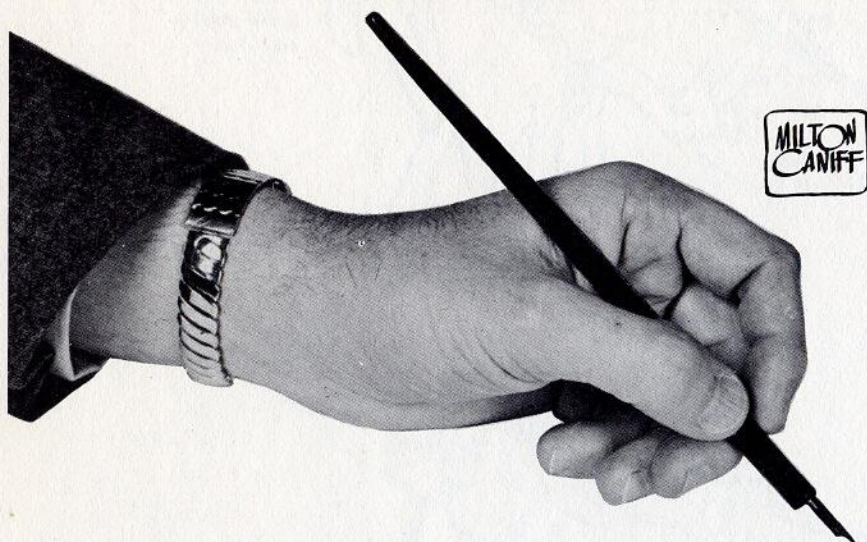


### Style by pen line

You are asked in this lesson to practice with the Gillott pen #170, or a comparable point, because it is the easiest of the flexible pens to use. Here are a number of examples done with different pens (and a brush) to show you different styles resulting from the use of different tools

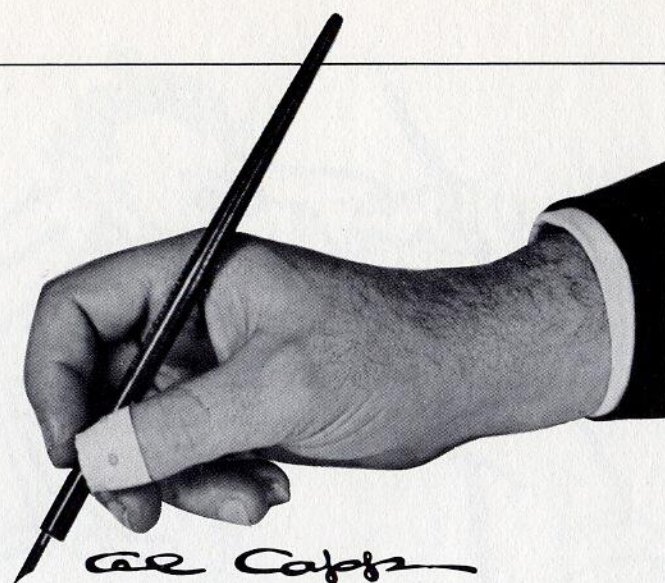


## Holding and using the pen



## Faculty hands holding the pen

Here are three of the most famous hands that have ever held a pen. The owners of these hands all agree that the only way you will get a pen to feel free and easy in the hand is by practice — and plenty of it. Every one of us has a different natural grip of his own and must discover it for himself as he draws. Notice that Milton Caniff is left-handed. He advises all fellow south-paws to start inking on the right hand side of their drawings

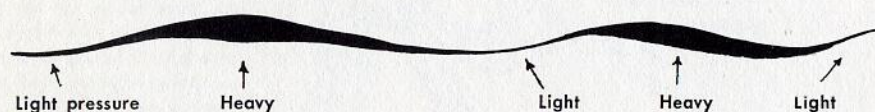


## Basic pen lines

We have prepared the basic pen lines for you on this page. Practice them to familiarize yourself with what you can do with a pen. Don't be satisfied with drawing them just once or twice — do them as many times as you think necessary. In shading with a pen you must be right the first time; there is no going back and fixing it. Nothing shows up quicker in a pen and ink drawing than a spot of crosshatching that has been gone over several times in an attempt to correct it. Shading and tone with a pen *must* look fresh. The quickest way to kill that look is to try touching up the drawing after it has been finished.

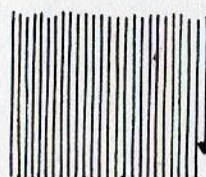
When practicing crosshatching and the other strokes shown, it is not necessary to use the pen illustrated. Try each of the squares with several different pens; you never know what a pen can do until you try it. In doing crosshatching of any kind be sure that the first set of lines is dry before you cross them with the next. After a while, the sureness of each line will indicate that you *know* what you are doing — skill will snuggle up to you before you realize it!

Pressure varies the thickness of pen lines

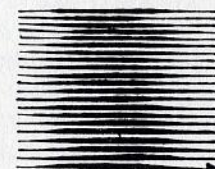
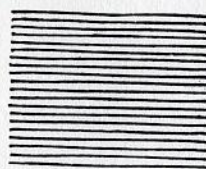


In practicing, try all types of pens — when doing cross hatch, be sure first set of lines is dry before crossing them with the next set

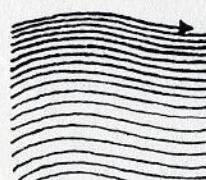
All examples are reproduced actual size.



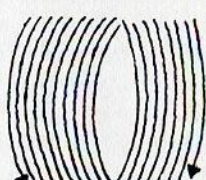
Slowly drawn—Gillott 170



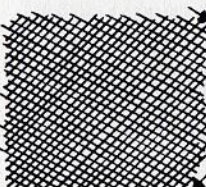
Increased pressure line—Gillott 290



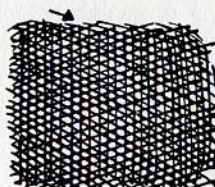
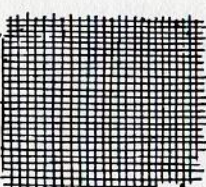
Curved lines—Gillott 170



More paper than ink—Gillott 170



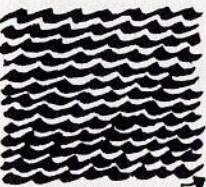
Cross hatch—Gillott 170



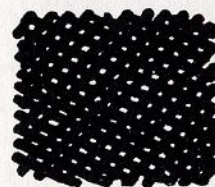
Triple cross hatch—Gillott 170



Short stroke—Drawing pen



Wavering lines—stub pen

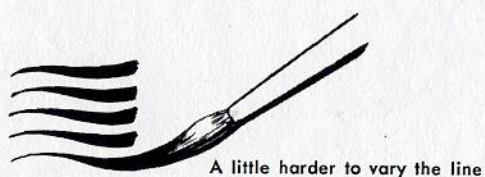
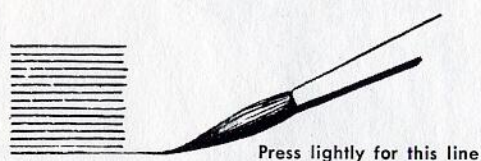


Deep cross hatch—Speedball pen

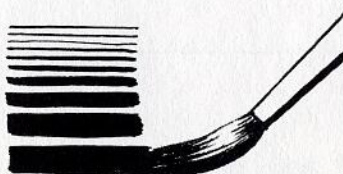




Example of brush work by Milton Caniff

**Brush drawing**

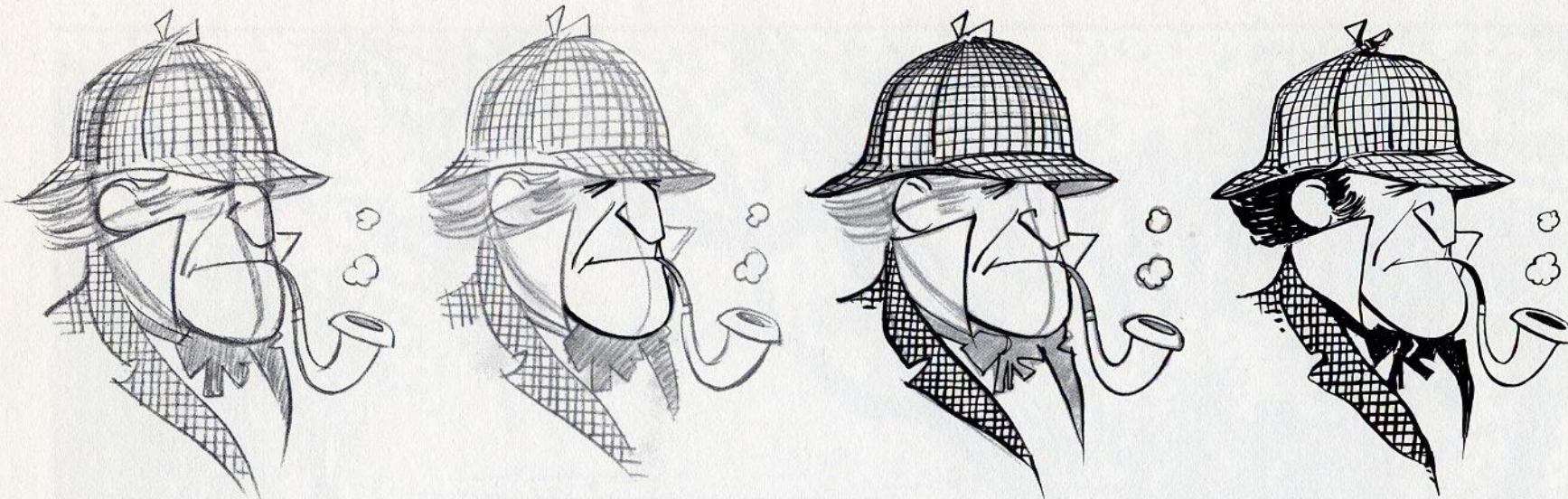
The brush is a most versatile tool. It has become very popular in cartooning during the last ten or fifteen years, particularly in the field of magazine gag panel cartooning. Besides drawing with the brush, you will use it for filling in solid blacks and for applying washes. When dipping your brush in the ink, always press it gently against the inside edge of the bottle neck to remove excess ink. *Before* touching your brush to the paper try it first on a paper palette (a strip of paper thumbtacked to the top or side of your drawing board). Never let ink dry on the brush. Always wash it by rubbing the brush *lightly and gently* on a cake of soap, then rinse it in clear water when you are ready to put the brush away.



Press hard and you get the full width of the brush. For practice, do the same examples as shown for pen. The brush works the same as the pen except that a broader effect is achieved.



## Inking the head



After the drawing is complete in pencil, you are ready to ink it in

1. Ink the features first — they give the face its expression and are first in importance

2. Complete the outlines and details. Ink the hair and black accents last, since you may want to use a more flexible pen or a brush for these

3. When the ink is dry on your completed drawing, remove the pencil lines with soft eraser

## Inking the figure



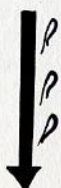
1. Ink in the face and head first

2. After the head — ink the upper body, arms and hands. Then the legs — feet last

3. When your outline is dry — and be sure it is — put in the details and shading, if any, and finally your solid blacks



Remember that you ink from left to right — unless you are left-handed



And that you ink from top to bottom

Be sure your ink is dry before erasing pencil lines: use art gum or other very soft eraser — so you won't rub off any ink

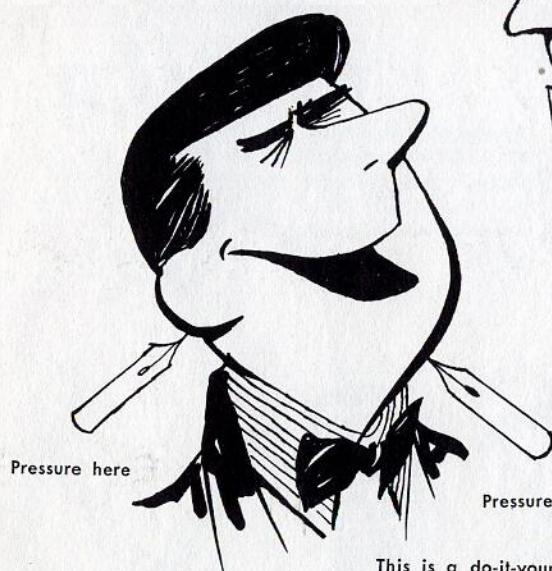


## Using the tools

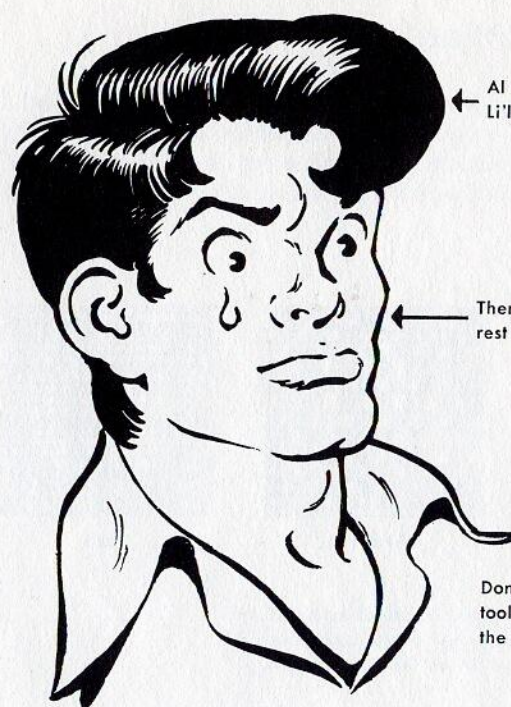
The pens and brushes may be identical, but the results of using them are always different in this business. Different hands automatically put different pressures on parts of the lines. As you practice, you will find strokes that come easily and others that will take some thought on your part. *Keep thinking*: every good cartoonist agrees that there is always something new and exciting to be learned from his pen. Now is the time to start practicing and experimenting until the skill of using your tools comes naturally to your hand. It will — in time.

Don't try to work with too much ink on your pen

Experiment with thick and thin lines. Think of shadows underneath and on the side away from the light — try putting your pressure on those lines



This is a do-it-yourself job: no one else can do your practicing for you!



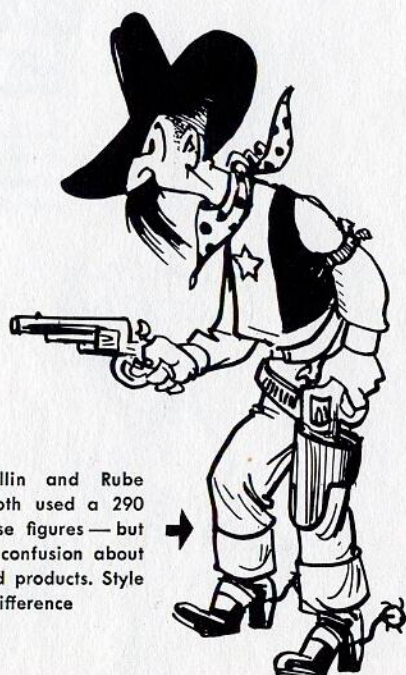
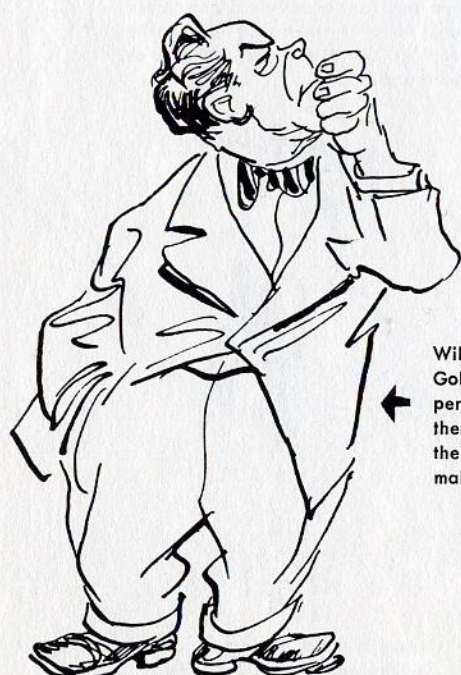
Al Capp uses a brush for Li'l Abner's hair

Then a 290 for the rest of the face

But when drawing a long line try to have enough ink to make it in one stroke



Some men leave thin white outlines on the sleeves, etc., of blacked-in figures. If the figure has a carefully drawn, expressive outline, leave out the thin whites. In newspaper reproduction they tend to fill in and mess things up. Keep it clear, simple and right



Willard Mullin and Rube Goldberg both used a 290 pen for these figures — but there is no confusion about their finished products. Style makes the difference



Practice pen lines every chance you get



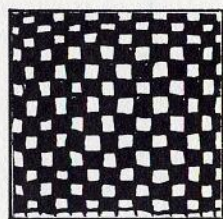
## Patterns on clothes

Clothing patterns serve several purposes. They give "color" and a decorative quality to simple outline drawings and are especially useful where solid blacks might confuse the form and action of the figure. They also help give an illusion of solid, three-dimensional

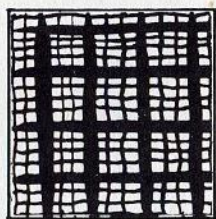
form to otherwise flat-looking figures and reveal something about the character of your cartoon actors. For instance, a loud checkered pattern on a suit suggests a sporty character, a tweed pattern an English country gentleman, a plaid a Scotsman, etc.



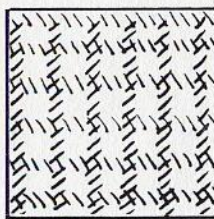
Vertical stripe



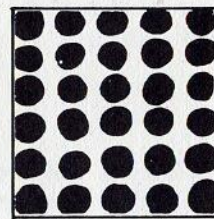
Checkered



Plaid



Tweed



Polka dot

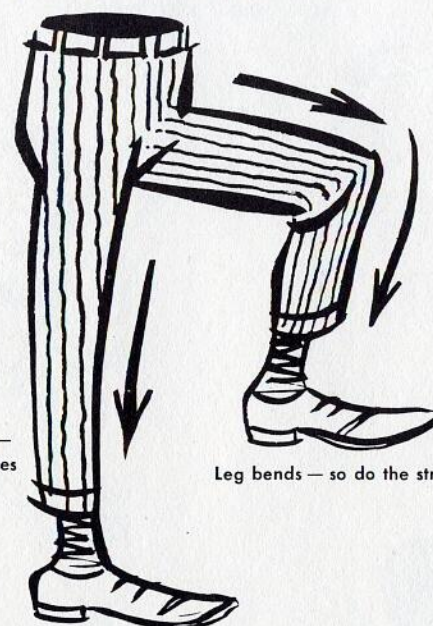


Flowered

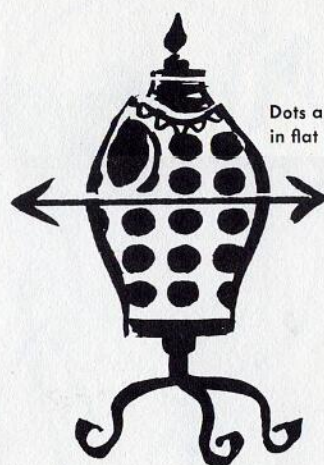
Simple flat pattern with no regard for the direction of the leg. (Can be hand drawn or put in with Zip-a-tone sheets as described on page 26 of the Introduction)

Leg is straight—  
so are the stripes

Here the stripe changes direction  
to show the direction of the leg



Leg bends—so do the stripes

Dots are all full circles  
in flat pattern

Here the dots are full circles in front but narrow to ellipses as they go around the form to give it a round, three-dimensional quality



See how stripes can help to give rounded form to the sleeve and to show its direction. At left, the curve of the stripes indicates that the arm goes away from us—at right, that it comes toward us

## Blacking in



Carefully pencil in the pattern where you want it



Then ink it in



Most cartoonists indicate where they want solid blacks with an "X" while they are inking in the outline so they won't forget



The finished figure with blacks and pattern inked in

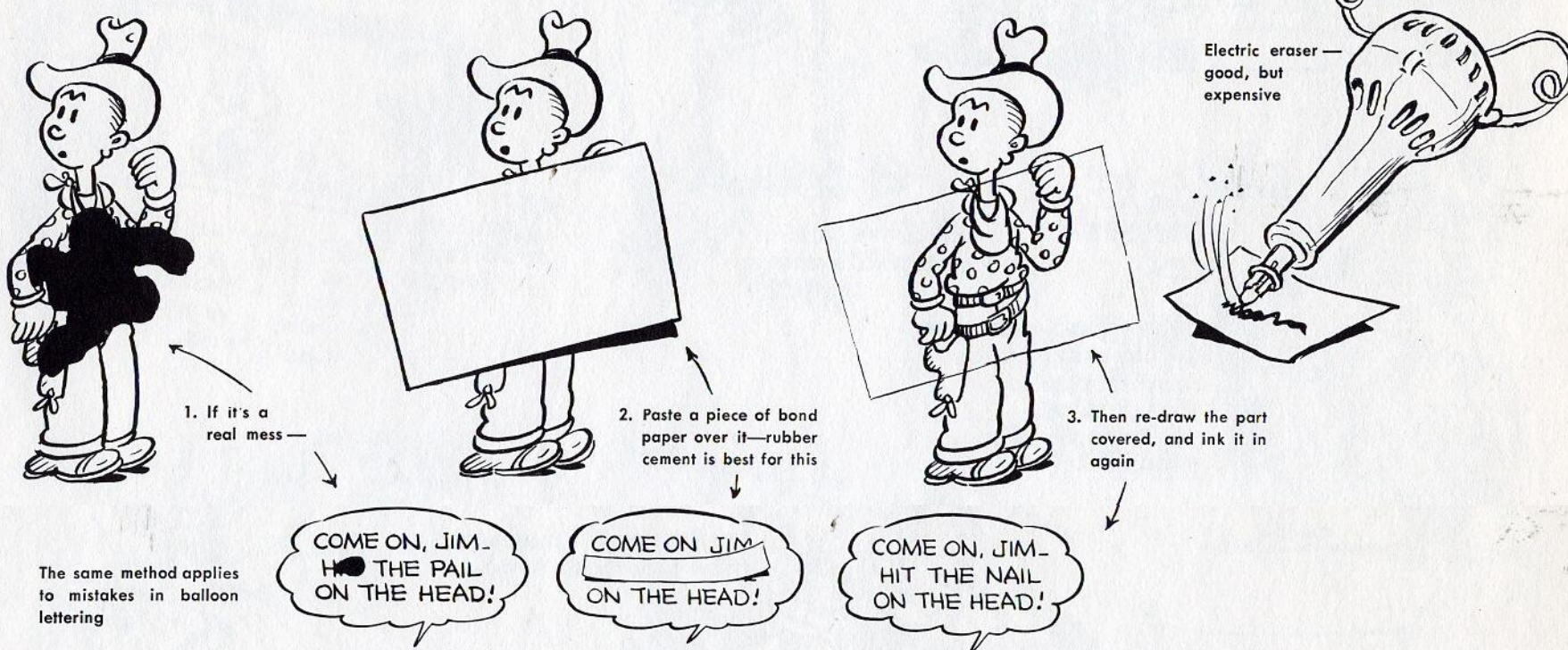
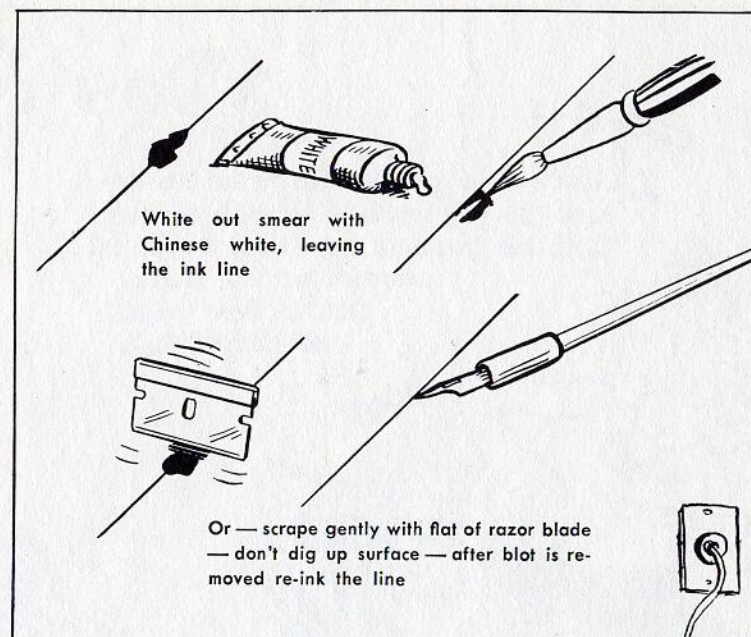


## Correcting mistakes on ink drawings

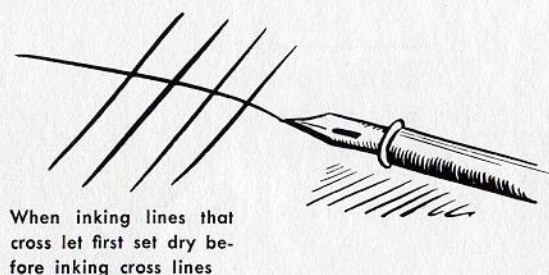
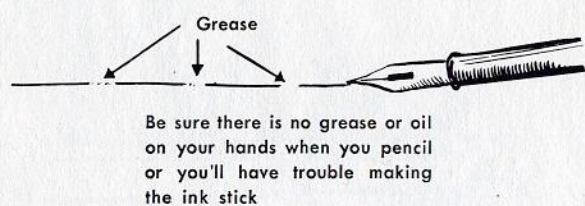
Every cartoonist loves to stick his finger into a freshly inked line to see if the ink is dry. As this creates a mess out of the line, we must have some way to clean up the smeared line we should have known was wet all the time.

As illustrated below, there are several good ways to clean up a messy line or spot of undesired ink. Regardless of the method used to correct an inked line, you should remember that your drawing is going to be reproduced. The camera will pick up any undesired marks left on the paper. Make a habit of developing a neat, clean, repair job.

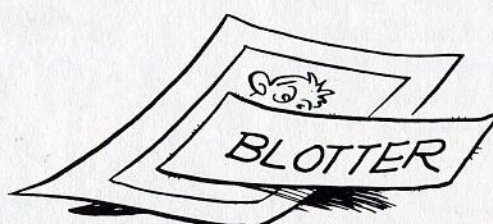
If the drawing is too badly smeared or splattered, it is usually better to tear it up and start over.



These are good ways of correcting your mistakes. But — the best way is not to make them in the first place



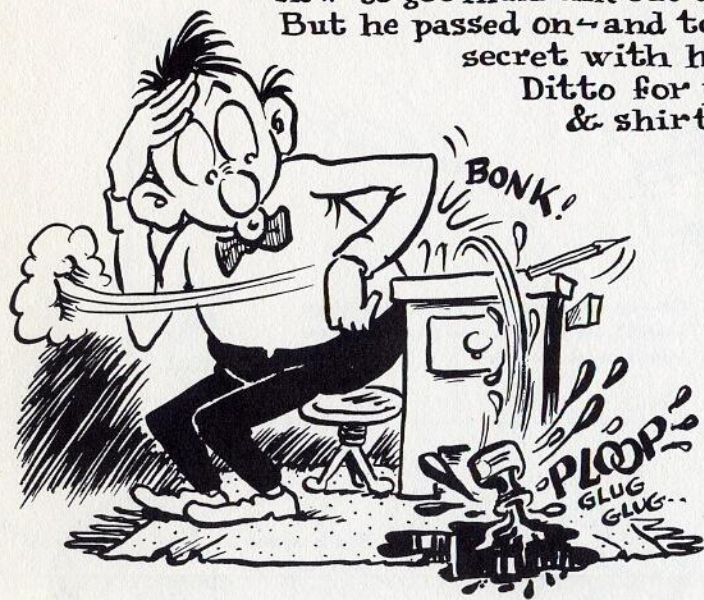
## Things to remember when inking



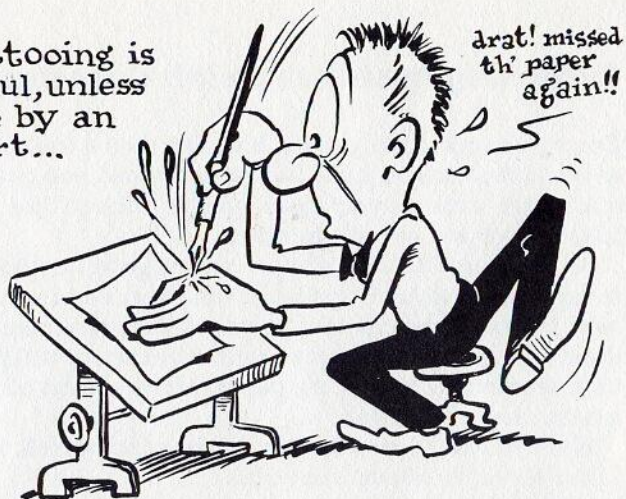


# Dos & Don'ts

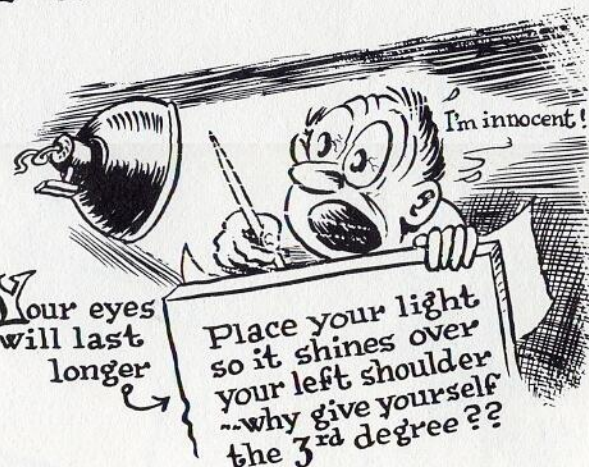
**T**here was once a man who knew how to get India ink out of rugs. But he passed on—and took his secret with him...  
Ditto for pants & shirts...



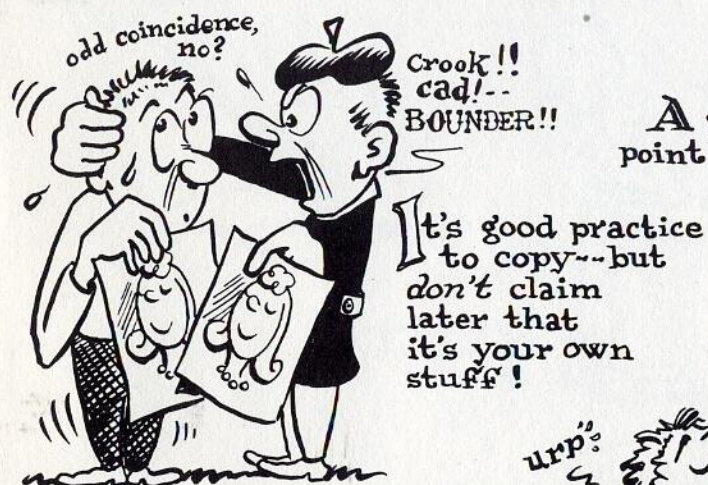
Tattooing is painful, unless done by an expert...



oops! Dropped it!!



A good pen-point will bounce—once!



now... to CREATE!

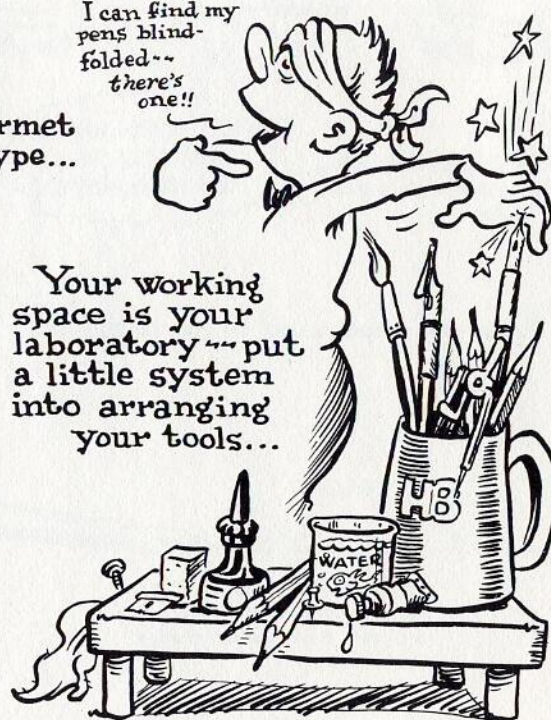
If you're a gourmet—be the neat type...



Neatness is important to Sales!

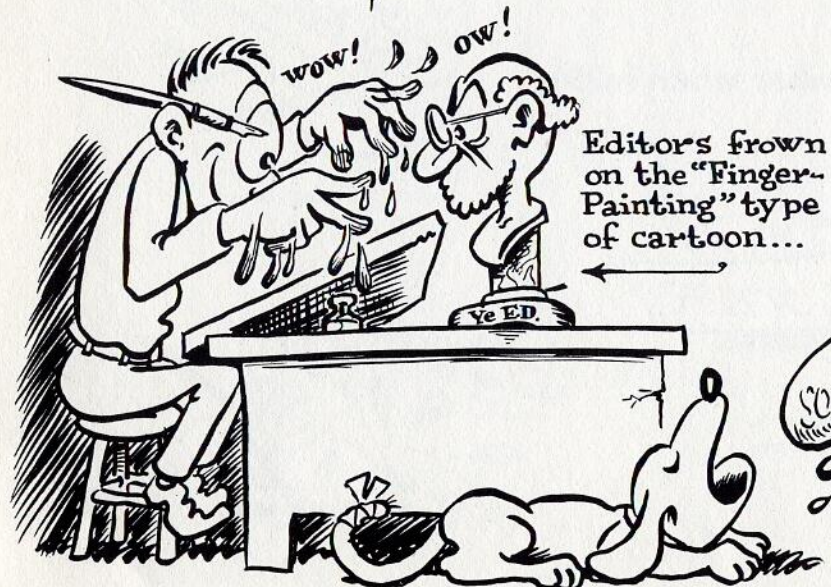
I can find my pens blind-folded—there's one!!

Your working space is your laboratory—put a little system into arranging your tools...



...this time I can skip the ears!!

Editors frown on the "Finger-Painting" type of cartoon...



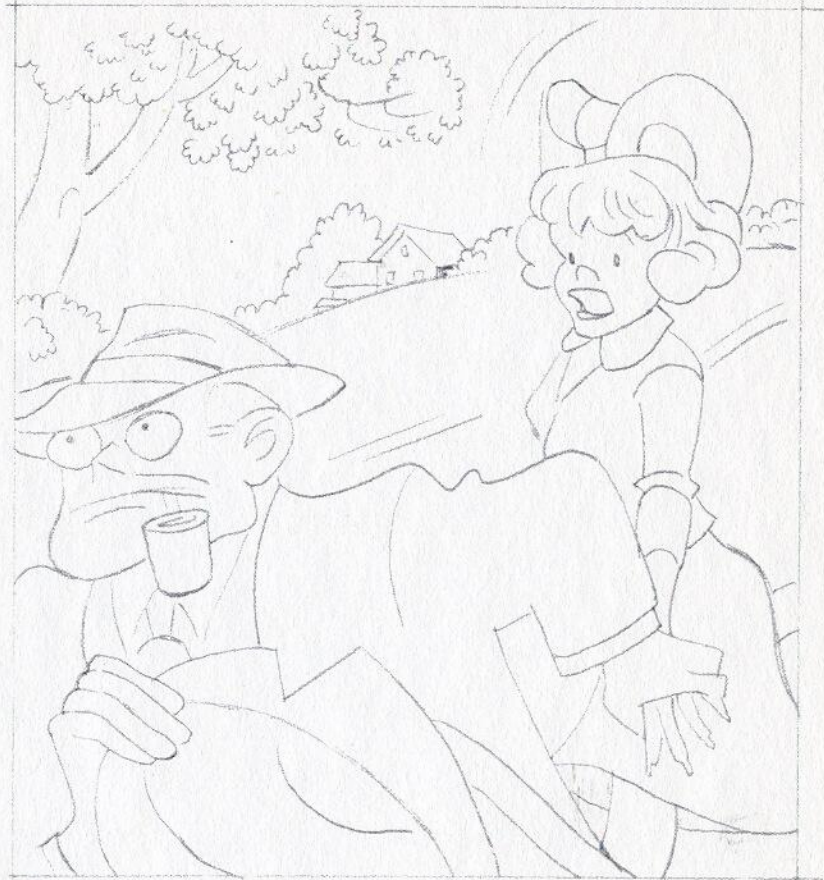
Wash your hands—often—



...and keep those pen-points clean!





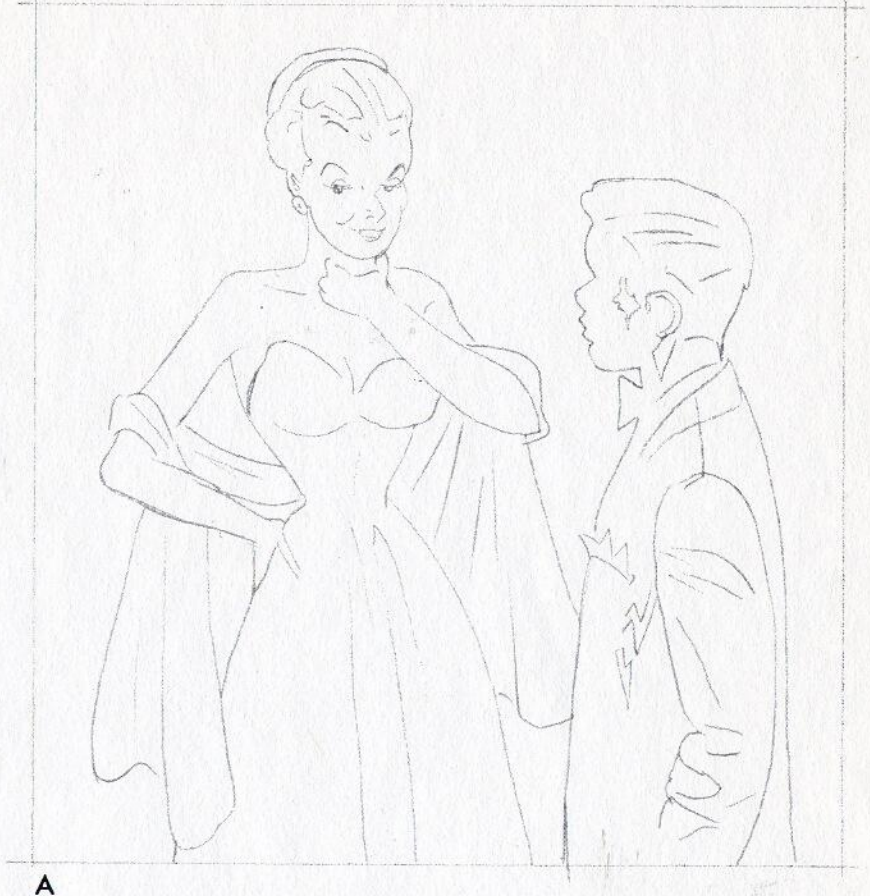


A

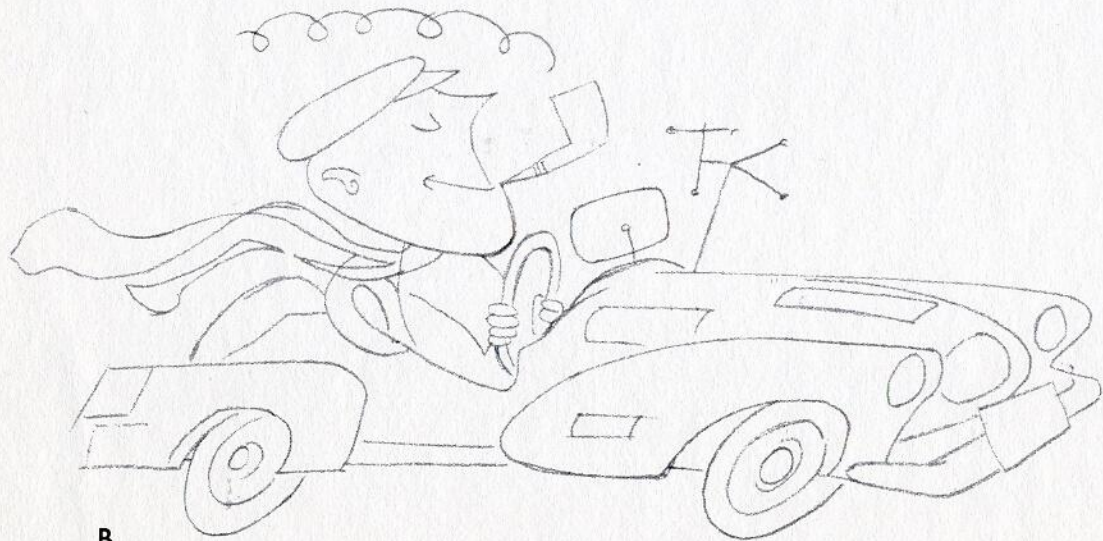
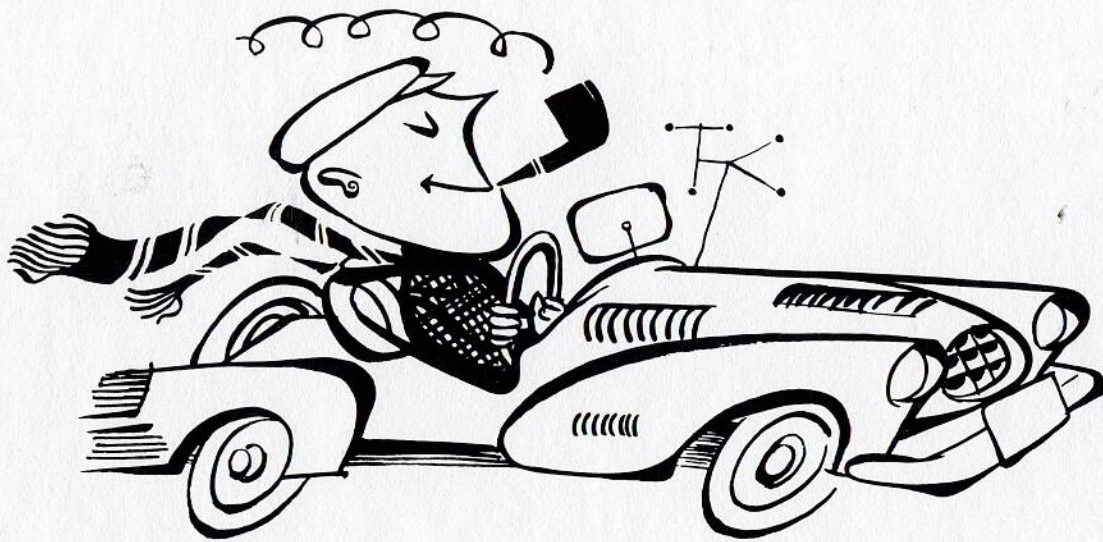


B





A



B



C



## FAMOUS ARTISTS CARTOON COURSE

### Student Work

#### Lesson 3

#### To study and practice

This lesson has been planned simply to start you on the right track in using the pen and brush. These are versatile tools -- there are so many possibilities for variation of line and style that it would be impossible to list them all. Just like every other cartoonist, you'll have to start experimenting with pen and brush lines until you find the kinds of lines that suit you and your style. For practice, pencil and ink the simple figures and heads you learned to draw in Lessons 1 and 2. When it comes to inking over your pencil lines, don't tighten up. Let your pen or brush swing freely: nothing looks so amateurish as a lot of unnecessary little multiple lines used where one bold line could do the job. Work for clean, simple expression with a minimum of details. Think as you ink.

The figures in the assignment plates at the end of the lesson were chosen carefully for one purpose: to free you from any problems of drawing and composition so that you can concentrate on control of your ink lines. Don't tackle the plates until you are confident that you know what your tools will do. We've given you two sets of the plate drawings. Use one for final practice and the other for doing the assignment to mail in to the School.

Your grade on this lesson will depend on the degree of control of pen and brush that you show us in your work.

#### The assignments you are to mail to the School for criticism

##### ASSIGNMENT 1

On the page marked Assignment plate 1, working line for line directly on the plate, ink over the pencil drawings marked A and B. Use a flexible pen and follow the originals just as closely as you can for width and direction of the pen lines. For the larger areas of solid black you should use a brush. If you feel that you need more pencil guide lines (on the girl's sweater, for instance), put them in for yourself. Do it lightly, however: this is rather soft paper. If you spoil one plate -- well, that's why we included an extra. Send the best one to us for criticism.

##### ASSIGNMENT 2

On the page marked Assignment plate 2, using a brush and ink, copy the drawings line for line. As you work, be alert for thickness and thinness of the lines. Your pressure on the brush and the direction in which you draw the lines are very important here. Again, we have included an extra plate page for you. Send in the one on which you think you've done your best work. Our only concern at the moment is to see how well you demonstrate your control of the tools.

Present your assignments in the same clean, professional manner you would use if you were submitting them to the cartoon buyer of a publication. Letter your name, address and student number carefully in the lower left-hand corner of each page. In the lower right corner, place the Lesson Number and Assignment Number. Mail to:

FAMOUS ARTISTS CARTOON COURSE  
Westport, Connecticut



**Famous Artists Cartoon Course**

**Westport, Connecticut**

**The head in detail**

Lesson

**4**

**Rube Goldberg**

**Milton Caniff**

**Al Capp**

**Harry Haenigsen**

**Willard Mullin**

**Gurney Williams**

**Dick Cavalli**

**Whitney Darrow, Jr.**

**Virgil Partch**

**Barney Tobey**









## Details of the Comic Head

In Lesson One you studied the simple comic head, drawing it from a toy balloon. Now you are ready to consider the comic head in a more detailed manner. Of course, the other parts of the body must fit in with the type of head you draw. But remember that the observer's attention is first focused on the face and head. Hence, these parts are all-important.

A mere exaggeration of features does not always convey character. There must be mobility in the features and feeling that a human being is pictured by the lines representing the face, no matter how comic or grotesque the face may be. On the opposite page is shown the head of Apollo, conceded to be the most finely proportioned of the Greek gods. Surrounding Apollo are heads that are about as different in beauty and symmetry from him as possible. Yet these comic heads and faces are as alive as that of the perfect Apollo, and perhaps convey more character. Moreover, they are not ugly in an unpleasant sense. A face can be

interesting, homely comic, crazily proportioned, and not be ugly. Ugliness is something that should be avoided in cartooning. It takes experience to know what is grotesque without being ugly.

The heads of the characters establish the mood of a cartoon. A well-known cartoonist who has several assistants to put in his inking and lettering never allows them to touch the heads. He knows that he must do them himself to keep the strip's flavor.

The faces in cartoons must have a vague familiarity as though you had met them before. You must feel like calling them Joe and Bill and Mabel and Jim. They are people — funny people — but *living* people.

As you draw facial expressions, you will probably find your own face trying to match the face you are drawing. Don't worry — this is normal for cartoonists. It may be highly amusing to your friends who catch you in the act — but if it helps you get the drawing right, go to it.

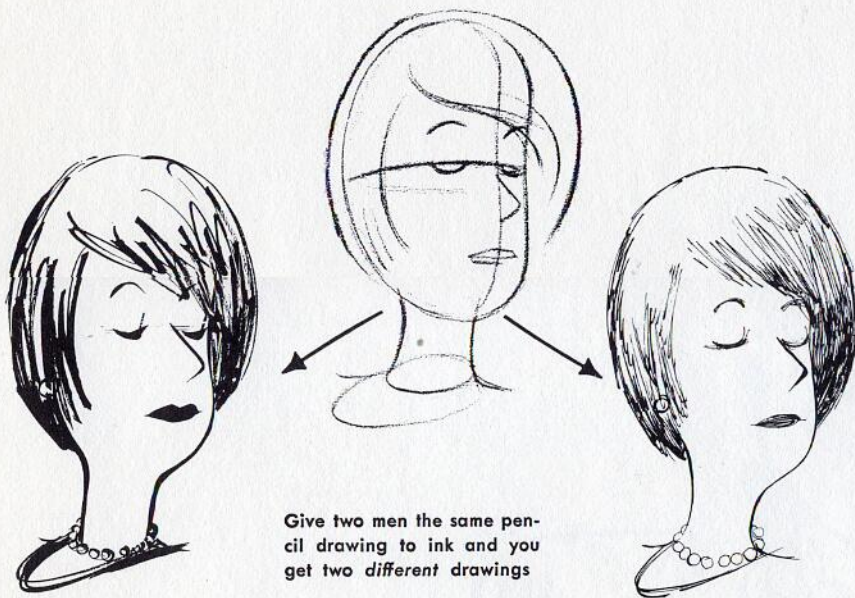


## A style develops

There is no limit to the way you can combine the features or treat them in pen and ink or brush and ink. There are two basic reasons why one cartoonist's work looks different from another's. First, one cartoonist may draw eyes close together while the other draws them far apart. Or one may draw big noses and small chins while the other likes big chins and small snouers. These differences are easily spotted. But the main differences will be found in such little things as the thickness or thinness of line or smoothness or roughness of line. They may be hard to see, but they give each individual cartoonist what is called "style."

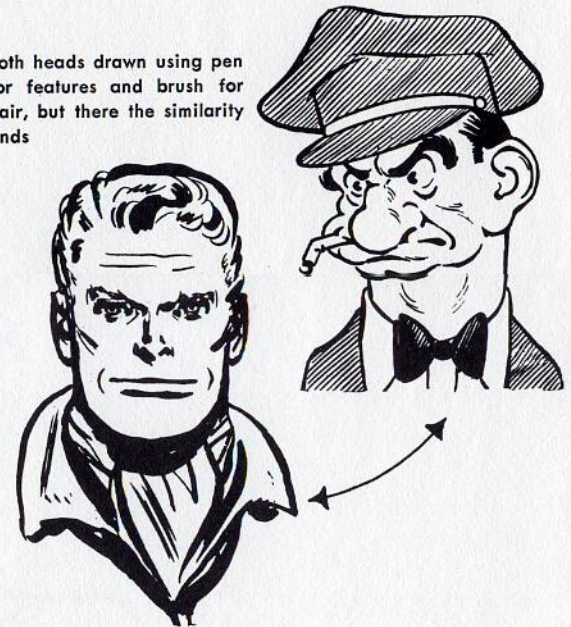
The beginner in cartooning usually worries because he hasn't developed a style. Some beginners sit around worrying so much

about style that they never have time to do the one thing that will give them what they want — actual *drawing*. If you practice and draw you can no more help developing a style than a baby duck can help swimming when it goes in the water. Drawing is like writing. Everyone who writes in long hand has a style — and the prisons are full of guys who tried to copy someone else's. The way you hold the pen, the shape of your hand, even the way you think all influence what comes off the end of your pen with the ink. Of course you can help this style along as soon as you see it developing, but don't try to force it. One of the easiest things for editors to spot is a forced style, and they don't like it. Be yourself — it's easier and the results will be better.



Give two men the same pencil drawing to ink and you get two different drawings

Both heads drawn using pen for features and brush for hair, but there the similarity ends



## Cartooning the head

We cartoon heads by simplifying their outlines and exaggerating those features which will best show the type we want to draw — handsome hero, villain, highbrow, lowbrow, etc. By exaggeration we mean making the features much larger or smaller than in real life. However, don't exaggerate the size of ALL the features or you'll end up merely with an unfunny oversized face. If, for instance, you wish to emphasize a large nose, make the eyes and/or the mouth small. Then, by contrast, the nose will seem even larger. By the same token, a big mouth will appear larger if the nose is small. To help get across your character's mood you can also exaggerate his facial expression



1 A normal face — regular features, but none of them particularly distinctive or outstanding



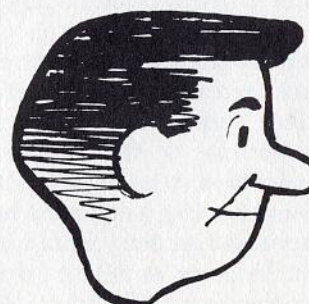
2 By emphasizing the mouth and chin and thickening the neck we make him more rugged, masculine — the adventure-strip hero type



3 Carrying the exaggeration further — massive jaw, low forehead, bull neck, heavy eyebrows — we make him a roughneck. Two-day growth of beard helps



4 Emphasize the brow, reduce the skull foliage and add spectacles to create the studious type



5 Exaggerate the nose and simplify the outlines for a more comic character



6 With further exaggeration we come up with a real low-comedy type

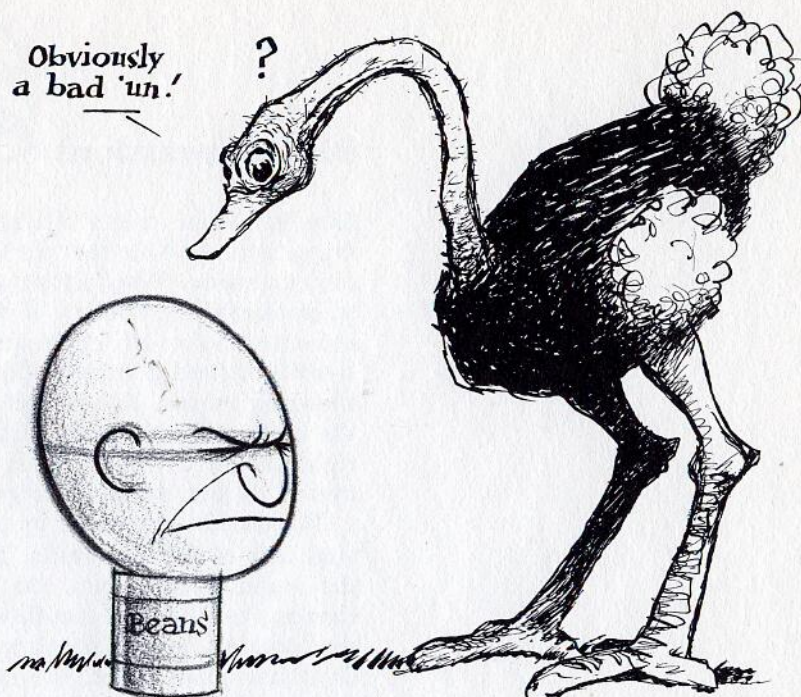


## The head and neck

If you balanced an ostrich egg on a tin can you'd have a good representation of the basic forms of the head and neck and their relationship to each other in their normal position. However, the head can assume many other attitudes: it can tilt forward, backward, or sideways as well as turn from side to side.

Combine these actions with the appropriate facial expressions and you can reveal your characters' feelings much more clearly and emphatically. A pugnacious expression, for example, becomes even more pugnacious if the head juts forward belligerently. A startled or frightened expression is heightened by a backward thrust of head and neck. These and similar head gestures will give life and animation to your cartoon figures.

When you're faced with a problem of expression, it's a good idea to act out the situation or emotion in front of a mirror. Study the attitudes your head assumes with various facial expressions. It often helps to exaggerate these head gestures — but always base your exaggeration on reality.



Remember the importance of the eyeline in showing the degree to which the head tips forward or back

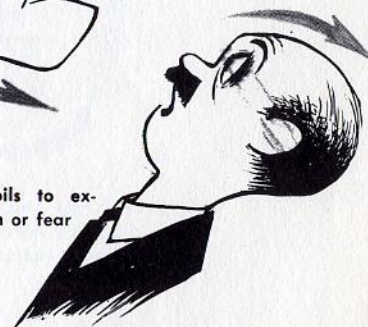


The head can turn only from side to side but by exaggerating the action we can make him really do a double take



Forward thrust suggests belligerence

Head recoils to express alarm or fear



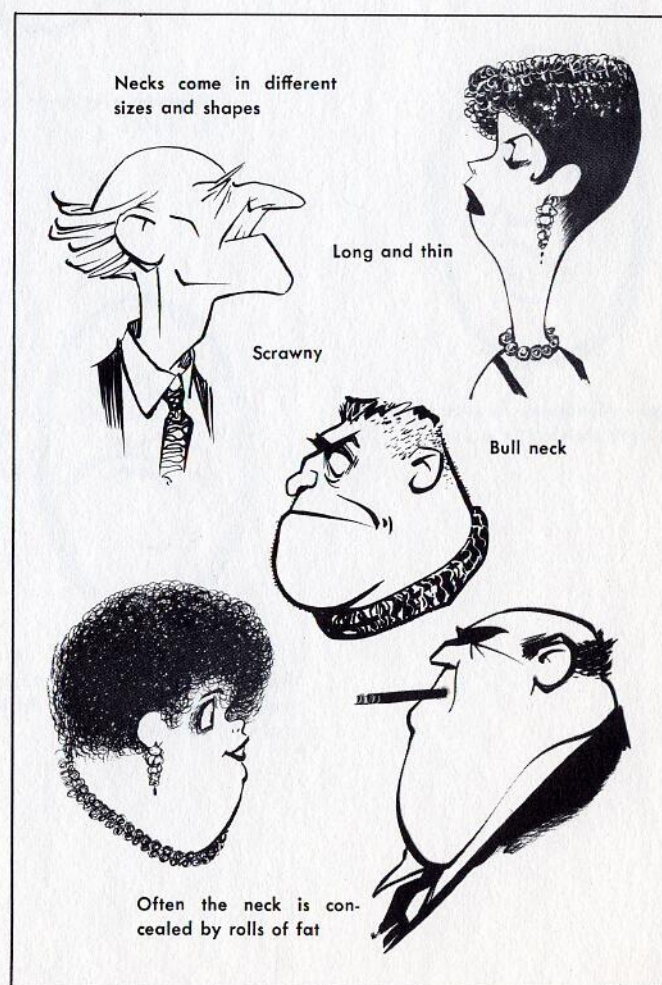
Head turns to give an over-the-shoulder sidelong glance for "come hither" look



For a haughty, supercilious expression, tip head back and get her nose in the air



Lower the head as well as the eyelids to suggest shyness







## Basic expressions

Here you see a variety of features that express some of the human emotions. Note that the ball-type nose has little to do with the expression. When showing "vanity," the nose is turned up to emphasize the hauteur of the subject, but generally the nose has little to do with expression because it is immovable unless the whole head is turned. The eyes and the mouth are keys to changing moods. Raised eyebrows, the frown (a line between the eyebrows), the droopy lids, the lowered eyebrows, the upright narrow circles with the eyeballs in the center, the closed eyes — all help you quickly get across the expression you want.

The mouth — accented by cheek and lip lines — is an equally vital part of any expression. The teeth showing from one side; the round, open mouth, the laughing mouth with the raised corners, the puckered mouth with a suggestion of the lower lip; the lopsided mouth; the large mouth; the small mouth — all have their place in the great cycle of human emotions. Constant practice — and an occasional peek into your mirror — will bring you to a point where these devices will become automatic in your work. They will immediately come to your mind — and hence the tip of your pen or pencil — as soon as you want a character to show an emotion in your cartoon creation.



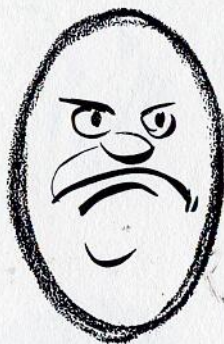
**Ease** — Eyes and mouth in neutral — that nice blank look that comes from having nothing on the mind



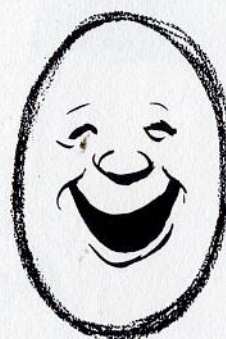
**Happiness** — Up go the corners of the mouth



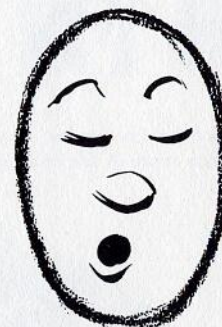
**Anger** — Eyebrows vee-ed down and teeth showing in a snarl



**Aggressiveness** — Eyes frowning, mouth turned down — lower lip line makes it jut out



**Hilarity** — Mouth curved up and open in a laugh. Eyes closed



**Drowsiness** — Eyes closed — mouth round and ready to snore



**Mildness** — Eyes neutral — almost a smile



**Hate** — Eyebrows heavy and frowning — teeth showing — the beast shows through in this one



**Sorrow** — A smile upside down — eyes closed and wrinkled for crying





**Vanity** — Eyes closed — up goes the nose — mouth clamped shut on his own opinions



**Nonchalance** — Eyes closed to the situation — mouth clamped shut in an almost-smile



**Surprise** — Eyebrows up — eyes popped open. Small, open mouth says "Oh!"



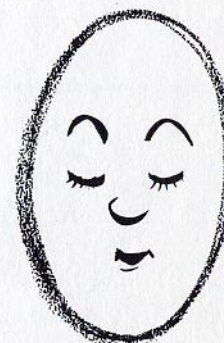
**Drunkenness** — Drooping eyelids and lopsided mouth show the well-known loss of muscular control



**Pain** — Pain contorts forehead and eyebrows. Eyes closed and mouth ready to say "ouch!"



**Stupidity** — Round eyes, slightly crossed — open-mouthed smile with tongue hanging out give us just one version of the cartoonists' favorite expression



**Innocence** — High eyebrows — closed eyes with a small, shyly smiling mouth



**Fright** — Eyebrows up — mouth opened for screaming



**Love** — Open eyes looking up show admiration. Some people in love smile



**Flirtation** — A wink and the lopsided smile gives us the amorous leer



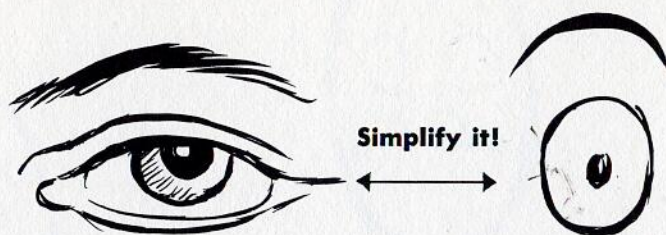
**Thirst** — Forehead and brows contorted — eyelids droop in exhaustion. Tongue hangs out of open, panting mouth



## The comic eye



Here is the simple dot eye in full circle by Willard Mullin



In this comic face, Rube Goldberg uses the simple dot to get the character he wants



Here Al Capp uses the dot with a half circle for Li'l Abner

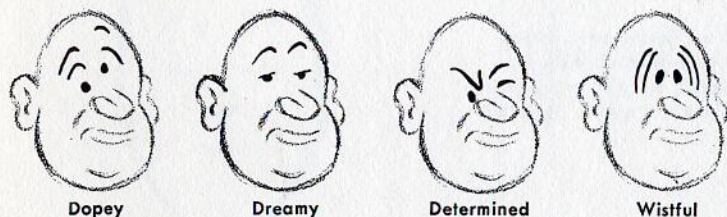
The eye, although of complicated structure, is basically a ball set in a socket of the skull and covered by lids of definite thickness. In cartooning we can simplify it to a dot or a dot within a circle (the dot representing the iris and pupil of the eyeball; the circle the eyelids which enclose it). By its placement within the circle the dot will show the direction of your character's gaze.

The placement of the eyebrow in relation to the eye is important in getting the right expression, so study the suggestions below and do some real-life observation by making faces into a mirror until you are thoroughly familiar with the action of the eye in expressing different attitudes and emotions.



An example of the simple dot eye as used by George Clark — note how much expression he gets with it

By using a simple dot eye you can make characters look...



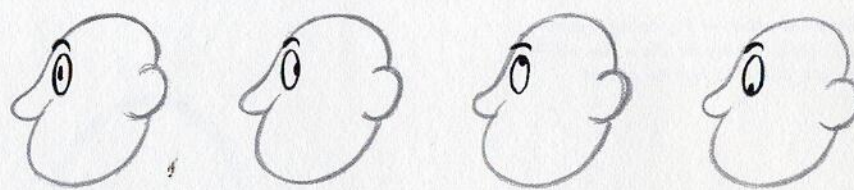
Dopey

Dreamy

Determined

Wistful

Or with a dot in a circle you can show...



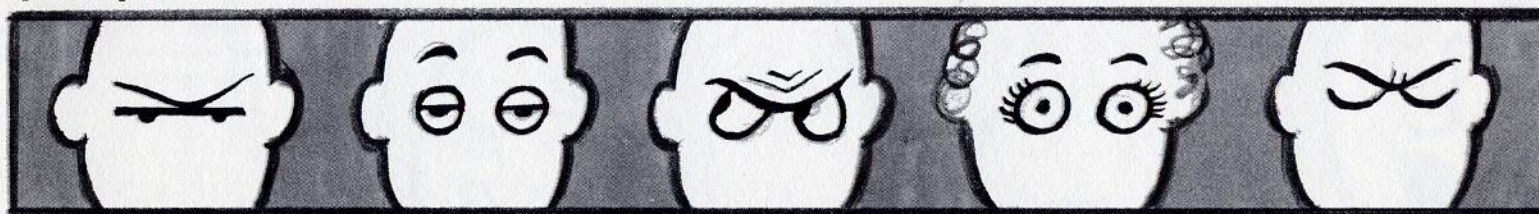
A straightforward look

A sidelong glance

An upward gaze

A downward glimpse

## Eye expressions



1. A straight line half covering the dots along with eyebrows pulled down results in a menacing glower

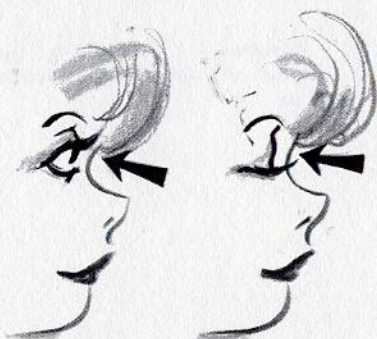
2. Semicircles partially concealing the dots show sleepiness

3. Sidelong glance with eyebrows down and furrows in brow gives a suspicious, skeptical look

4. For a surprised stare raise the eyebrows and center the dots. Eyelashes suggest feminine character

5. Curved lids covering dots give a look of concentration when eyebrows are lowered

When drawing glamour gals, a more realistic approach to drawing the eyes allows emphasis to be put on this attractive feature of female faces



Emphasize eyelashes

Note curve of lowered eyelid as it covers the underlying eyeball



In a normal expression about one fourth of the iris is covered by upper lid

Showing the entire iris gives a staring, pop-eyed look





Indians have big noses—so Willard Mullin gave this fellow one

### The comic nose

There's something fundamentally funny about a nose. It sticks into other people's business — it smells a rat — it makes a sound like a foghorn. Best of all, you can use it very effectively to create character. Large or small, a nose is a cartoonist's delight.

The human schnozzle has only four basically different shapes. However, by combining the characteristics of one group with those of another and adding a dash of exaggeration you can come up with countless comic variations. You can use almost any outlandish shape, as long as it looks as though your character can breathe through it. Here are a few of the thousands of possibilities. Practice them — and have the fun of creating some of your own.



Here we have the elevated proboscis on a haughty butler by Willard Mullin

Here's a fine example of a sniffer by Al Capp



Here Rube Goldberg uses the simple ball nose to create a rather meek little bookworm

### Four basic beaks

**1 Regular** (normal bridge): It has no special character but can be exaggerated in size — made either very large or tiny in relation to the size of face

**2 Roman** (high bridge): This one is the basis for the bugle of an Indian brave or the sniffer of a disdainful dowager

**3 Grecian** (no bridge): Nose and forehead form a straight line to give an autocratic look. Suitable for stage and screen stars or aristocratic dames

**4 Pug** (low bridge): The snub nose of the comic Irishman can be modified to retroussé or potato nose







Mean old chin—thin and bony—by Al Capp



Square strong chin by Willard Mullin

### The mouth and chin

The mouth smiles, grins, snarls and hollers. You will probably find your own mouth moving as you draw one on a character—let it. It means that you are getting a little feeling into your drawing. Here again, simplify. Don't try to draw a whole line of separate crockery for teeth in an open mouth where a single line will do. The shadow of the lower lip, cheek lines, etc., are up to you: will they help the character you are drawing, or will they clutter it up? Naturally, in the adventure-type of characters, the mouth must have more realism.

The chin is an important part of the face. With it you can indicate weakness, strength or weight. The chin also gives you a great chance to be funny—it can be exaggerated in size or left out altogether. Just remember that the chin, mouth and nose should all more or less fit together. They have an important bearing on character.



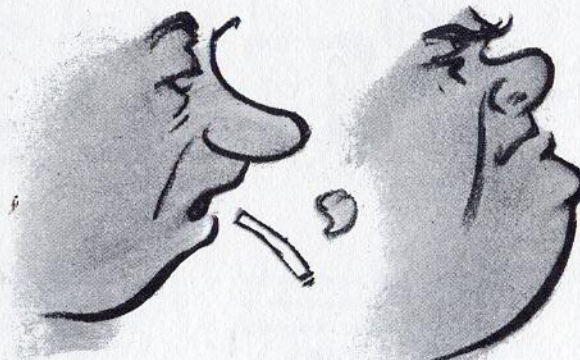
Weak—little or no chin—by Rube Goldberg



The heroes—or good guys—have strong, square chins



To express belligerence the chin juts out



The receding chin suggests weakness



The double chin shows overweight and sometimes coarseness

With age—and loss of teeth—the chin moves up to meet the nose



Neat, crisp and pretty



Smile, please!



Eek!



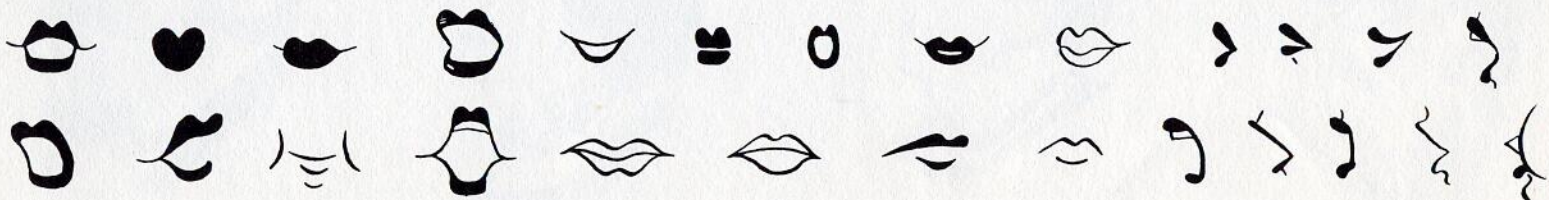
Get expression into it



Girl's chin lines must be super-neat

### Girls' mouths

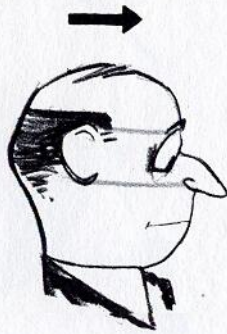
Makeup makes a girl's lips stand out—draw your girl's mouth like a smooth lipstick job





## The ear

The ear listens to gossip, brushes against revolving doors when it sticks out too far, and serves as a mooring for strange-looking earrings. It can contribute to the character of the head (the cauliflower ear of the prizefighter is a good example) but not to the facial expression. In its natural state the ear is complicated — full of confusing ridges and convolutions — but, since simplicity is the essence of cartooning, we can streamline it down to its overall shape and very little else.



The ear is located on line with eyebrows and base of nose



When head tips forward, ear rises in relation to eyes

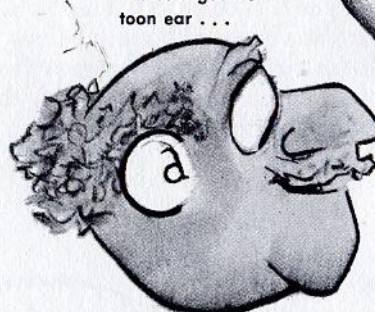


When head tips back, ear drops lower than eye

Too complicated for cartooning. We'll simplify it



A capital "C" with a small "a" inside makes a good cartoon ear . . .



. . . or just the simple outline will do



A simple way of expressing a cauliflower ear



Jug-handle ears give this head its character

## Drawing hair on the head

When you draw hair on the comic head, remember this very important point — be sure to draw the outline of the top of the head in pencil before you put hair on it. Many beginners draw the face and then pile a stack of hay on top for hair. They forget that there is a solid head under the hair, and create a head which is all out of proportion. When drawing a character for a strip or a continued feature, you want the head to look the same every time. To get the same shaped head — pencil the shape *under* the hair every time.

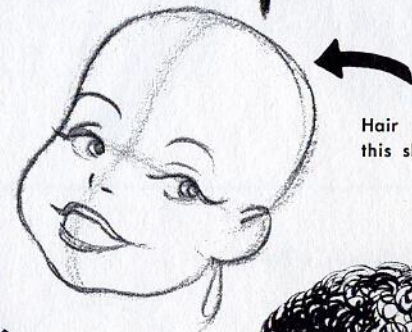
For reproduction, use as few lines as possible — you needn't draw every straw in a haystack. Simplify it



Remember that hair looks solid in a mass, especially in a girl's hairdo



Hair should have covered this shape



Hair should cover this shape



**Wrong**

Hair drawn without following basic shape of head



**Right**

Hair covers shape of head



The skull is a solid round form and the hair curves around it





## Hair to indicate type

Hair, or the lack of it, can indicate the type of character you wish to draw. Sophisticate or yokel, glamour type or spinster — by their hair you shall know them — and draw them. Hair can be funny — or serious. Learn to use it.

When drawing hair, it sometimes helps to change from pen to brush — or from a Gillott 170 to a Gillott 290. Hair is flexible and demands a flexible line. Don't use a thousand lines where three would do the trick. Try to make it appear to grow from the scalp by "combing" it with the pen or brush, letting the ink strokes follow the flow of the hair strands.

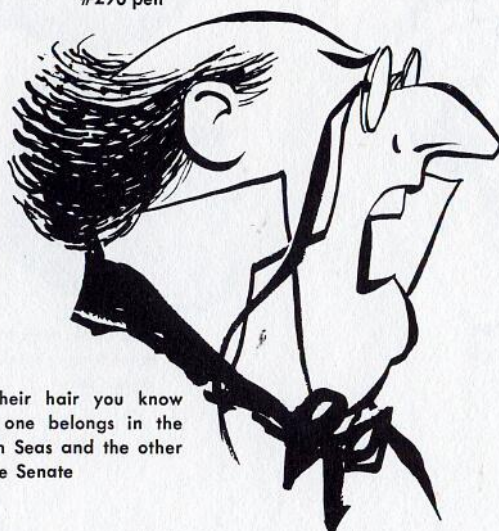


Suit the hair style to the character

Long sweeping strokes

Brush

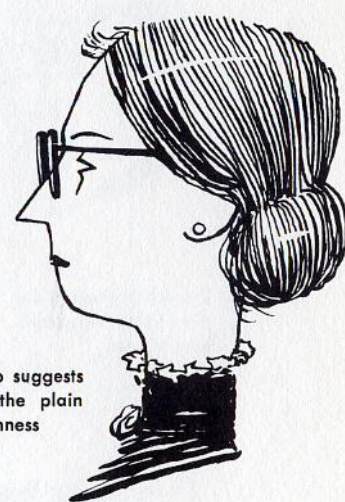
#290 pen



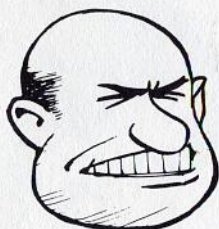
By their hair you know that one belongs in the South Seas and the other in the Senate



Fancy hairdo suggests frivolity — the plain coiffure, primness



## A beard is born



1 Five-o'clock shadow



2 Visible bristles suggest three-days' growth



3 Full bloom



Dignified



Bad



Disreputable



Benevolent

## Hair on the face

Everyone is intrigued by a beard. Look at the posters on the fences in your town. If the faces do not have a mustache or beard drawn on them, they are likely to have one by the time you finish this lesson!

Like the hair, beards and mustaches can indicate character and type. They can make a figure look domineering or down-trodden, diabolic or divine.

Styles in mustaches and beards seem to grow funnier as they vary — maybe because hair on the face seems so unnecessary and futile. Futility is a basic comic factor in human nature.

Treat the beard or mustache the same as the hair: don't over-draw, and keep your lines sharp and clean. Here are a few suggestions:

A mustache should be exaggerated for cartoon purposes. Make it very large or very small



Oversize walrus-type soup strainer



Chaplin type

A beard can show a man's character as well as his type



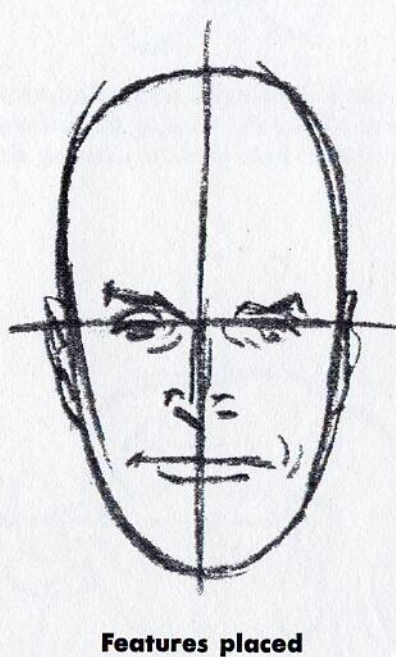
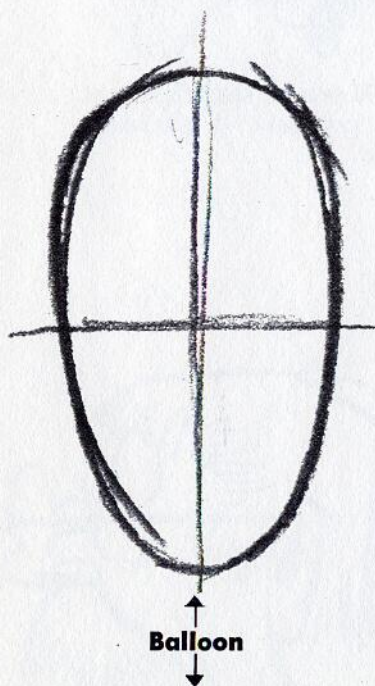
### Putting the parts together

You've seen how to construct the eyes, nose, mouth, chin and ears of a comic character and how to decorate the result with hair. Using the balloon head of Lesson 1, now is the time to experiment and practice the business of putting the parts together. This should be fun and if you're going to be a cartoonist, this experimenting will continue for a lifetime.

Combining features is an endless pastime — the results are endlessly surprising. Most of the characters you develop will wind up in the waste basket. This is a natural state of affairs and comes under the heading of experience. Some of them, however, will smile or smirk or glare up at you from the paper and set your mind working along new and delightful lines. *These* are characters and, what's more, they're *your* characters — your own personal, beautiful babies. They make life worth living. Keep that pencil of yours searching for them.

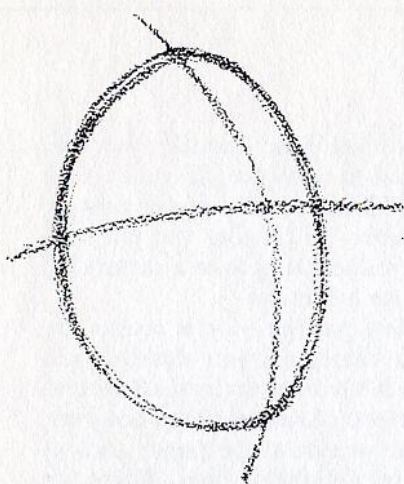
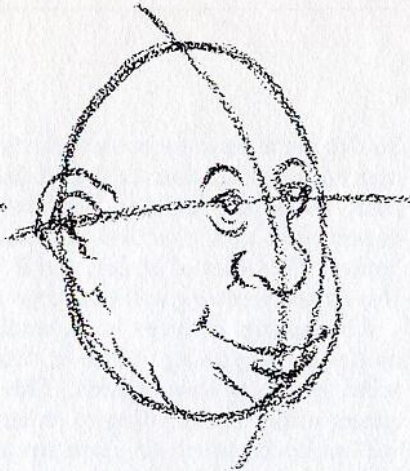
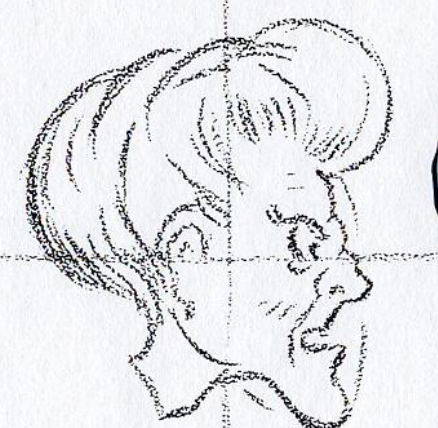
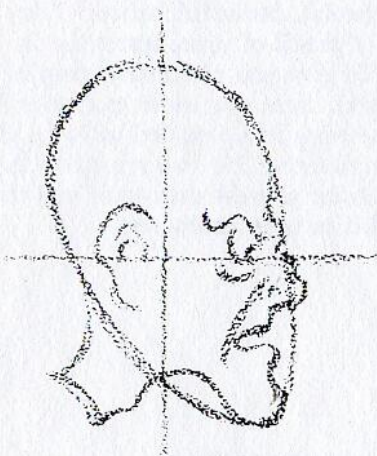
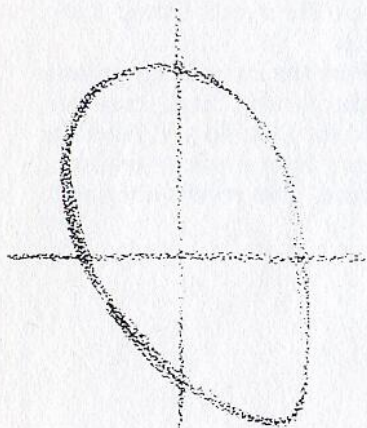
To give you concrete examples of how the combining process works, here are some examples by the faculty. Each man has started with a penciled balloon, placed the features and inked in the drawing. No two are alike; they vary from comic to realistic, but the process they used was the same. The results are good, solid cartoon characters.

#### Milton Caniff

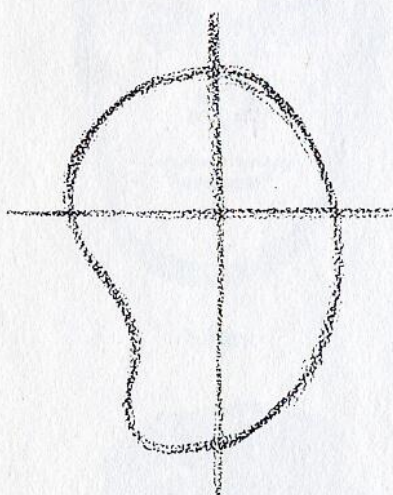
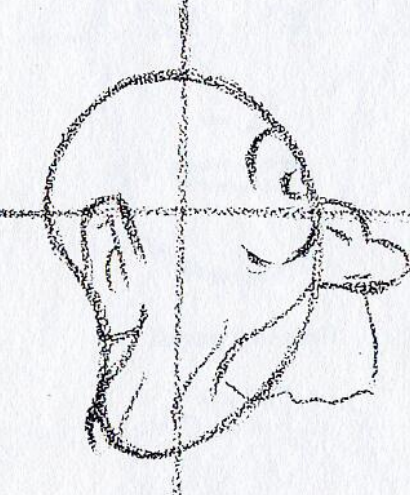
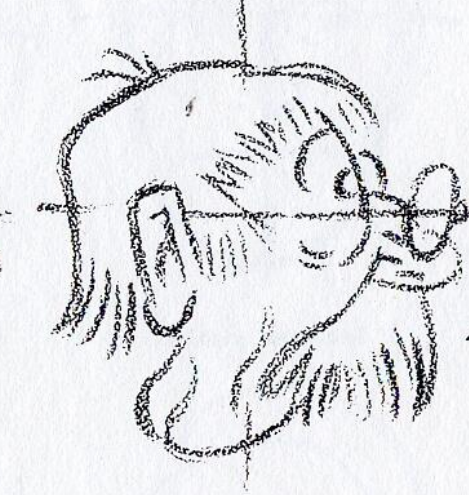
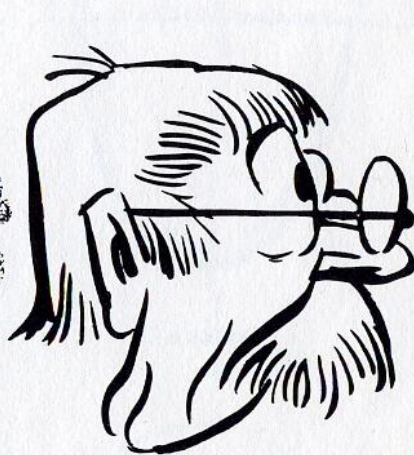
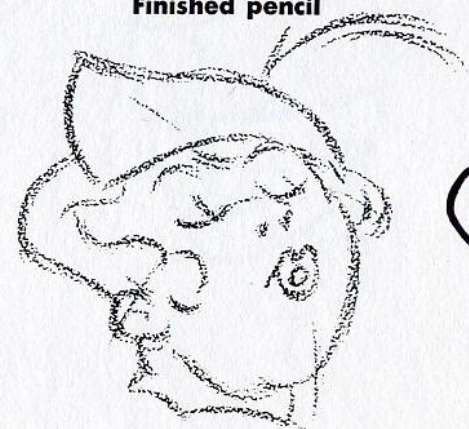
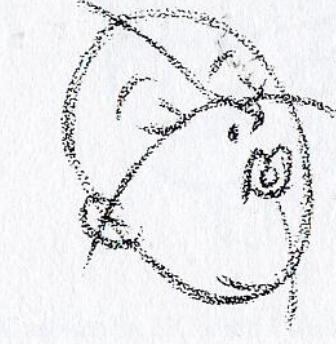


For heads I use a Gillott crowquill pen #659. It is a very flexible pen and you can get a wide variety of lines with it.



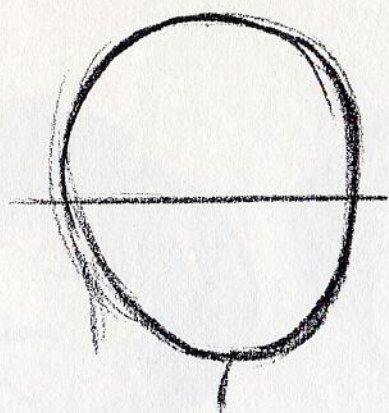
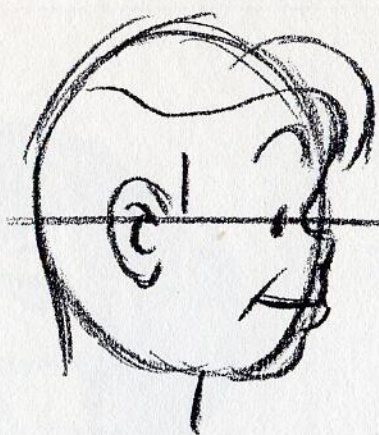
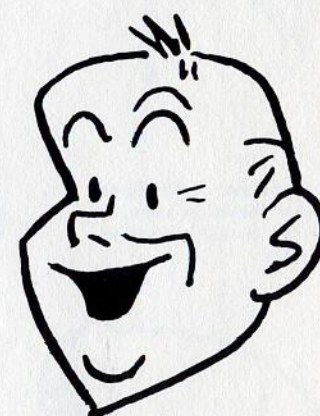
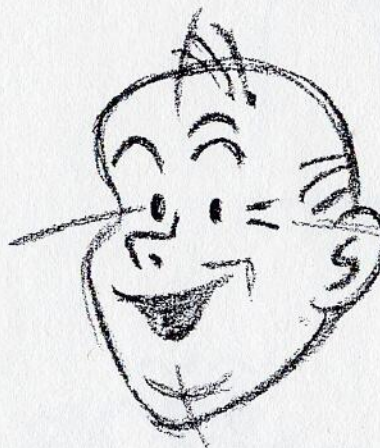
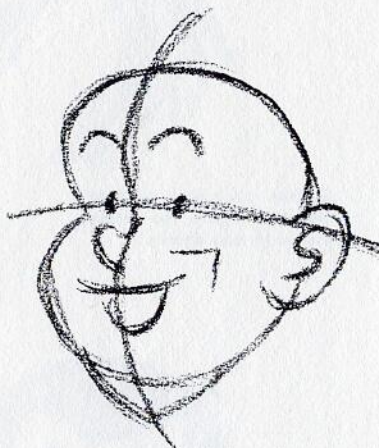
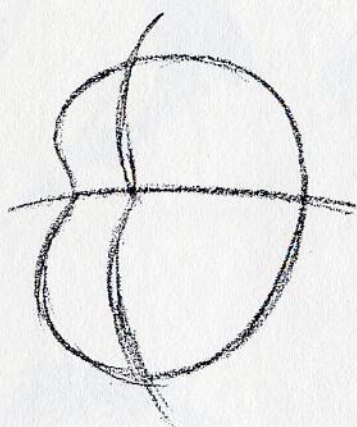
**Al Capp****Balloon****Features placed****Finished pencil****Inked**

For these drawings I used a Gillott #290 pen on smooth bristol board. Notice the varying thicknesses of pen lines — I like heavy pen lines to help give the drawing depth.

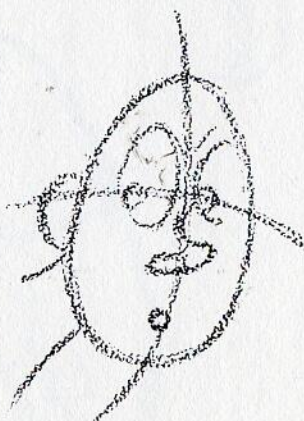
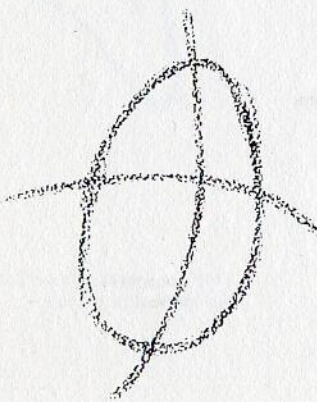
**Rube Goldberg****Balloon****Features placed****Finished pencil****Inked**

For inking I have always liked a Gillott #290 when I am working on a smooth surfaced paper.



**Harry Haenigsen****Balloon****Features placed****Finished pencil****Inked**

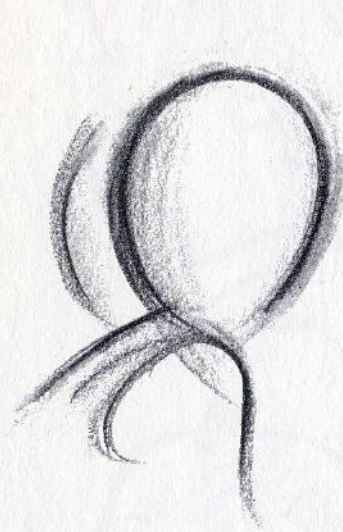
I pencil with an HB pencil and use a Gillott #170 pen to ink with.

**Willard Mullin****Balloon****Features placed****Finished pencil****Inked**

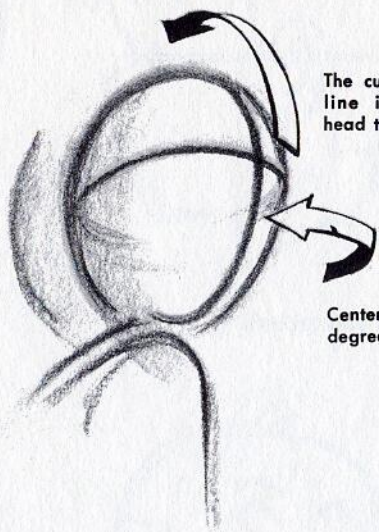
For the two heads above I used a Gillott #290 and drew them on rough paper called Coquille board.



## Examples



**1** Like the rest of the figure the head should be alive, so draw the overall gesture or action first



**2** Use the guidelines to show the tilt and turn of the head

The curve of the eye line indicates that head tips back

Center line shows the degree of turn



**3** Use guidelines to locate features. Draw the expression and add details



**4** Ink and erase pencil lines



Keep your outlines simple. Unnecessary lumps and bumps make faces grotesque rather than funny



For newspaper reproduction, the fewer lines you use the better. You'll get a cleaner job without all those hen-scratches

**This**

Make mustache appear to grow from the face

**Not This**

Avoid the artificial, "glued on" look



Vary the shapes of your practice heads . . . it's fun!



FAMOUS ARTISTS CARTOON COURSE  
Student Work  
Lesson 4

To study and practice

In this lesson you learn to add the fine points to the basic heads you drew in Lesson 1. Here are expressions, head gestures and different types of eyes, noses, mouths, chins, ears and hair for you to experiment with. Experimenting with features is the process by which you arrive at new characters -- a process that never ends for professional cartoonists.

For practice, swing balloon ovals in pencil as you did in Lesson 1. Then think of an expression and the best, simplest way to get it into your drawing. Don't trust to luck. Plan your faces carefully; the features must be in the right locations. Once the features are located correctly, small refinements of expression can be added. When you do your inking, leave out unnecessary lines to make the drawings as simple and direct as possible. Never use two lines where one will do the job.

We will criticize and grade your work on the basis of the way you construct these heads and the effectiveness of the head gestures and facial expressions.

The assignment you are to mail to the School for criticism

On a sheet of 11 x 14-inch Bristol board, using pen and ink, draw six heads (three groups of two heads) about the size of the examples on pages 13 -- 15. Put necks and collars on all of them. Here are your subjects and views:

- |         |   |                                                                                                                       |
|---------|---|-----------------------------------------------------------------------------------------------------------------------|
| Group 1 | { | A side view of a hero or good-guy type. He is smiling at the head of . . .                                            |
|         | { | An innocent-looking teen-age girl -- three-quarter front view.                                                        |
| Group 2 | { | A three-quarter front view of a determined-looking business man who is just about to fire . . .                       |
|         | { | A weak character, side view, who is surprised at the news.                                                            |
| Group 3 | { | A middle-aged woman, three-quarter front view. She wears earrings and has a vain, disdainful expression because . . . |
|         | { | An elderly seafaring character, three-quarter front view, with or without hair on his face, is winking at her.        |

Present your assignment in the same clean, professional manner you would use if you were submitting it to the cartoon buyer of a publication. Letter your name, address, and student number carefully in the lower left-hand corner of the page. In the lower right corner, place the Lesson Number. Mail to:

FAMOUS ARTISTS CARTOON COURSE  
Westport, Connecticut



**Famous Artists Cartoon Course**

**Westport, Connecticut**

# **The figure in detail**



Rube Goldberg

Milton Caniff

Al Capp

Harry Haenigsen

Willard Mullin

Gurney Williams

Dick Cavalli

Whitney Darrow, Jr.

Virgil Partch

Barney Tobey







## The figure in detail

In Lesson Two you studied and practiced drawing the comic figure in its basic form. We are now ready to tackle the comic figure in greater detail. What you learned in Lesson 2 will still apply in this lesson. The gesture-action sketch or stick figure should continue to be used throughout the first part of this Course. The preliminary figure is the "skeleton" which helps you determine the size and basic shape of the cartoon character.

It is at this time that your own individual style will start to assert itself. Don't fight it. Use what we give you as a guide, follow it as closely as possible, but if you find that your own style starts to wander in respect to details of features and technique of inking, let it. When we criticize your work we will keep this in mind and try to help you develop along your own path. Of all arts, cartooning is probably the most individual. A cartoonist must draw as he sees and feels. Remember that you are portraying the doings of human beings. Each of us sees and draws our fellow humans in a little different light.

To show you how styles may differ and yet be built from the same basic beginning, each member of the faculty has drawn a comic figure, starting from a simple foundation and proceeding to the final inked figure. Their styles are miles apart, but each started in a similar way and used a similar method to determine size, action and over-all shape.

While practicing drawing the cartoon figure, don't tumble into the nasty pitfall of always drawing figures in the same position. Many beginners and even some professionals develop, without being aware of it, the bad habit of drawing most of their figures facing in the same direction, and with the hands

and legs in the same position. It may be fun to practice drawing the figure in one position to show off to your friends, but even they will tire of it if you don't change it once in a while. The human figure is never static — even when it is asleep or relaxing, there is a feeling of motion — and the cartoonist must be able to draw it in any of its countless positions.

At this stage of your work, don't pay too much attention to fancy clothes and shading. These things will be covered in greater detail later in the Course. For now, you are primarily concerned with drawing the figure in simple outline. Keep the dress plain. Many beginners who have failed to construct their comic figure soundly will try to cover up the bad job with clothes and shading. This never works. A figure that is off balance or improperly constructed will remain so, regardless.

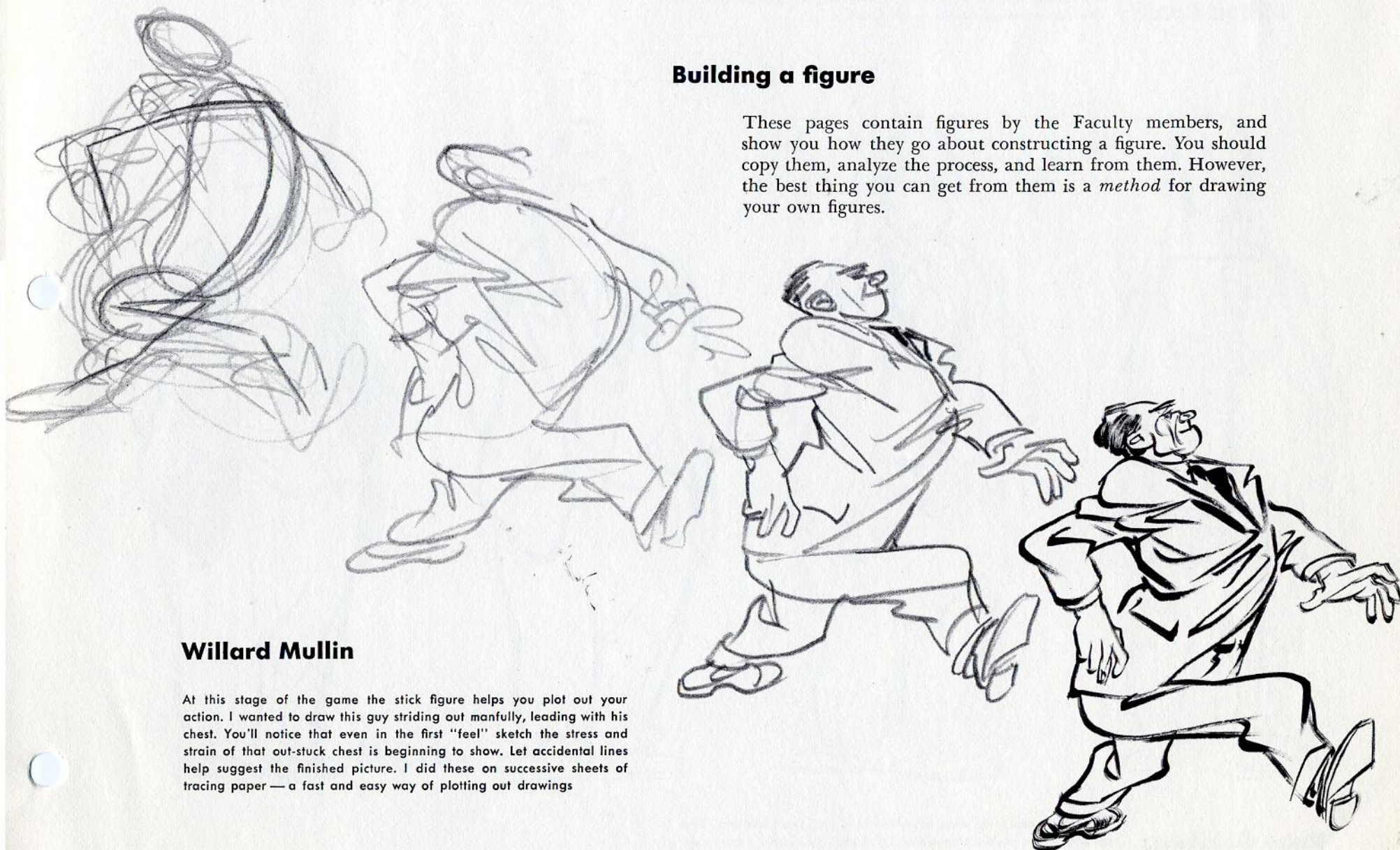
When working on this lesson, pencil lightly, because after you ink the figure you will want to clean it up by removing the pencil guide lines with an eraser. Heavy pencil lines are hard to remove and will give your drawing a messy look. When the figure is finished in pencil, and you are sure that it is the way you want it, you can start inking. Ink with care, but try not to freeze up. Ink is so final that it seems to scare most beginners. The only way to overcome this fear of inking is to throw yourself into it and let the pen or brush swish out the figure. Don't be afraid of making mistakes in ink. Ink mistakes can be fixed if they are not too bad. You can always start over. You won't learn to ink with complete freedom by drawing three or four figures; it will take hundreds — but each completed figure will make the next one that much easier.

### Building a figure

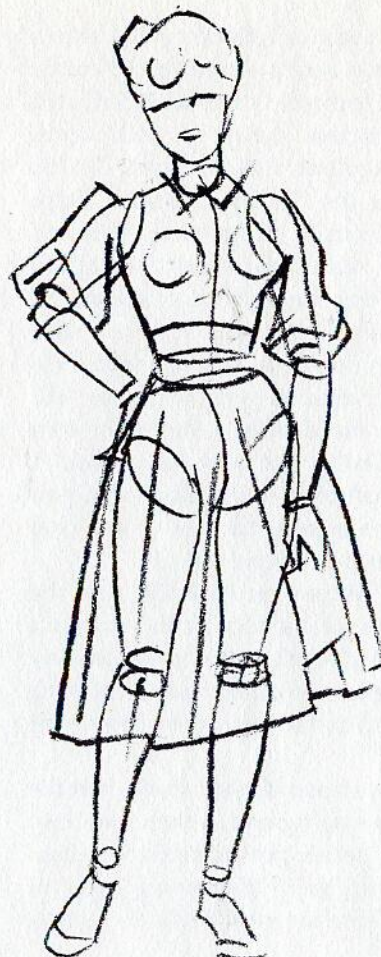
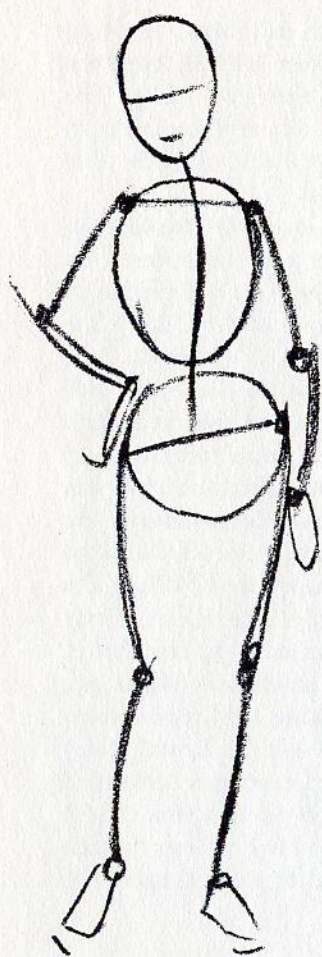
These pages contain figures by the Faculty members, and show you how they go about constructing a figure. You should copy them, analyze the process, and learn from them. However, the best thing you can get from them is a *method* for drawing your own figures.

#### Willard Mullin

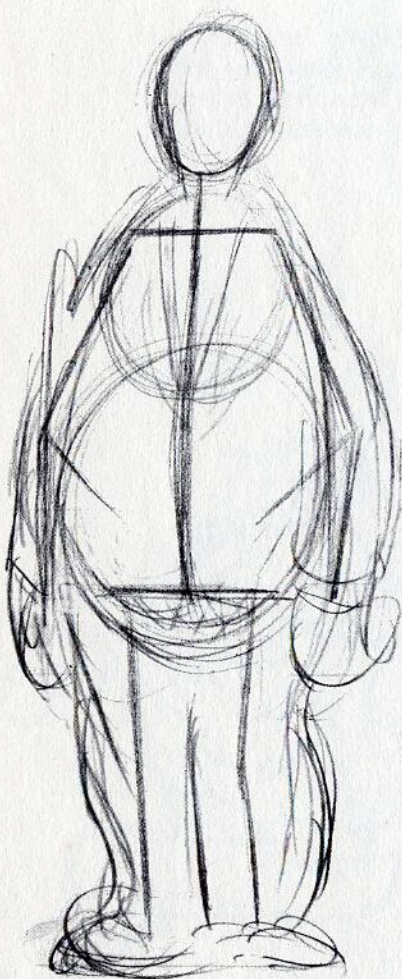
At this stage of the game the stick figure helps you plot out your action. I wanted to draw this guy striding out manfully, leading with his chest. You'll notice that even in the first "feel" sketch the stress and strain of that out-stuck chest is beginning to show. Let accidental lines help suggest the finished picture. I did these on successive sheets of tracing paper — a fast and easy way of plotting out drawings





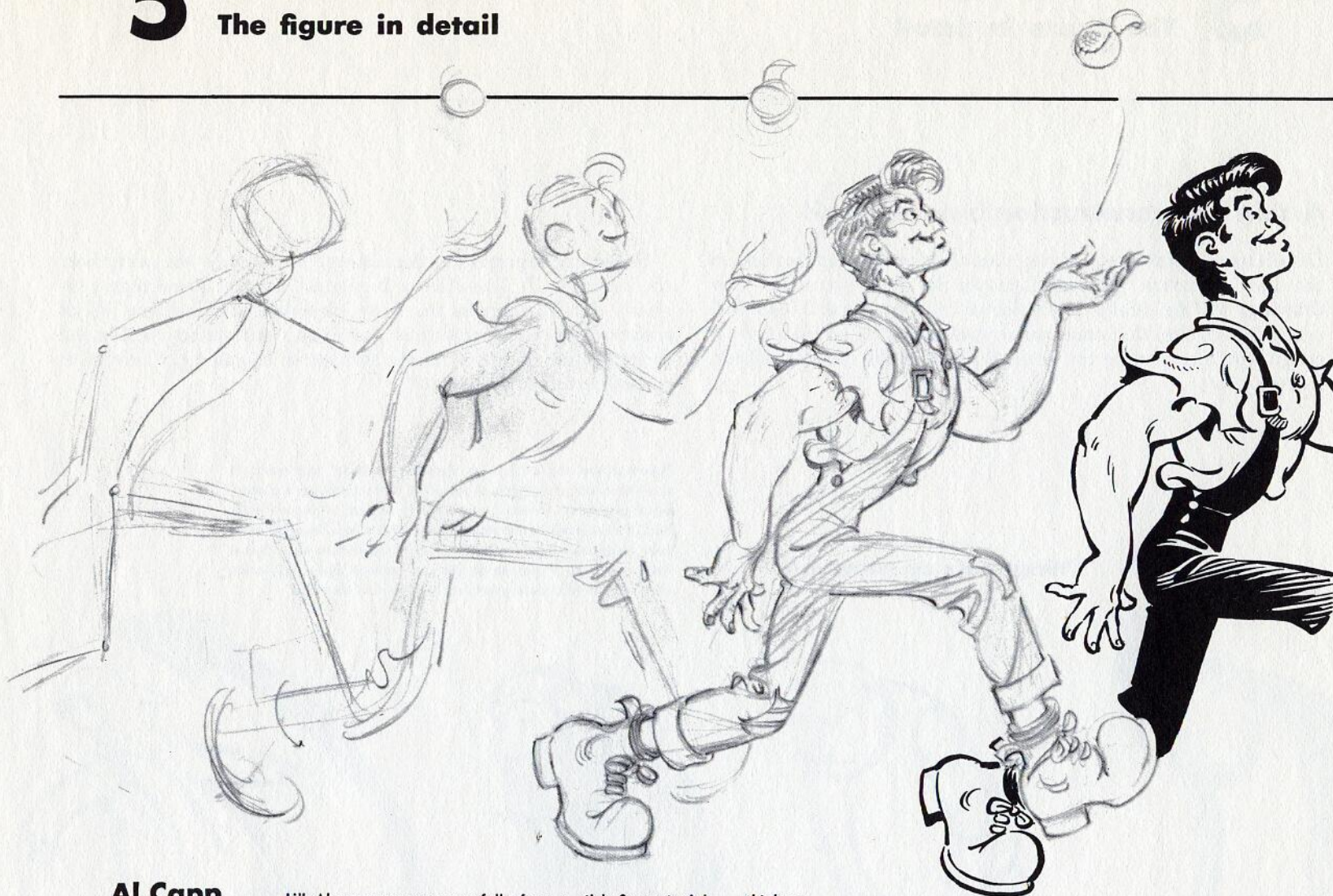
**Milton Caniff**

The realistic adventure figure starts with the stick figure, requires more attention to life-like details and anatomy

**Rube Goldberg**

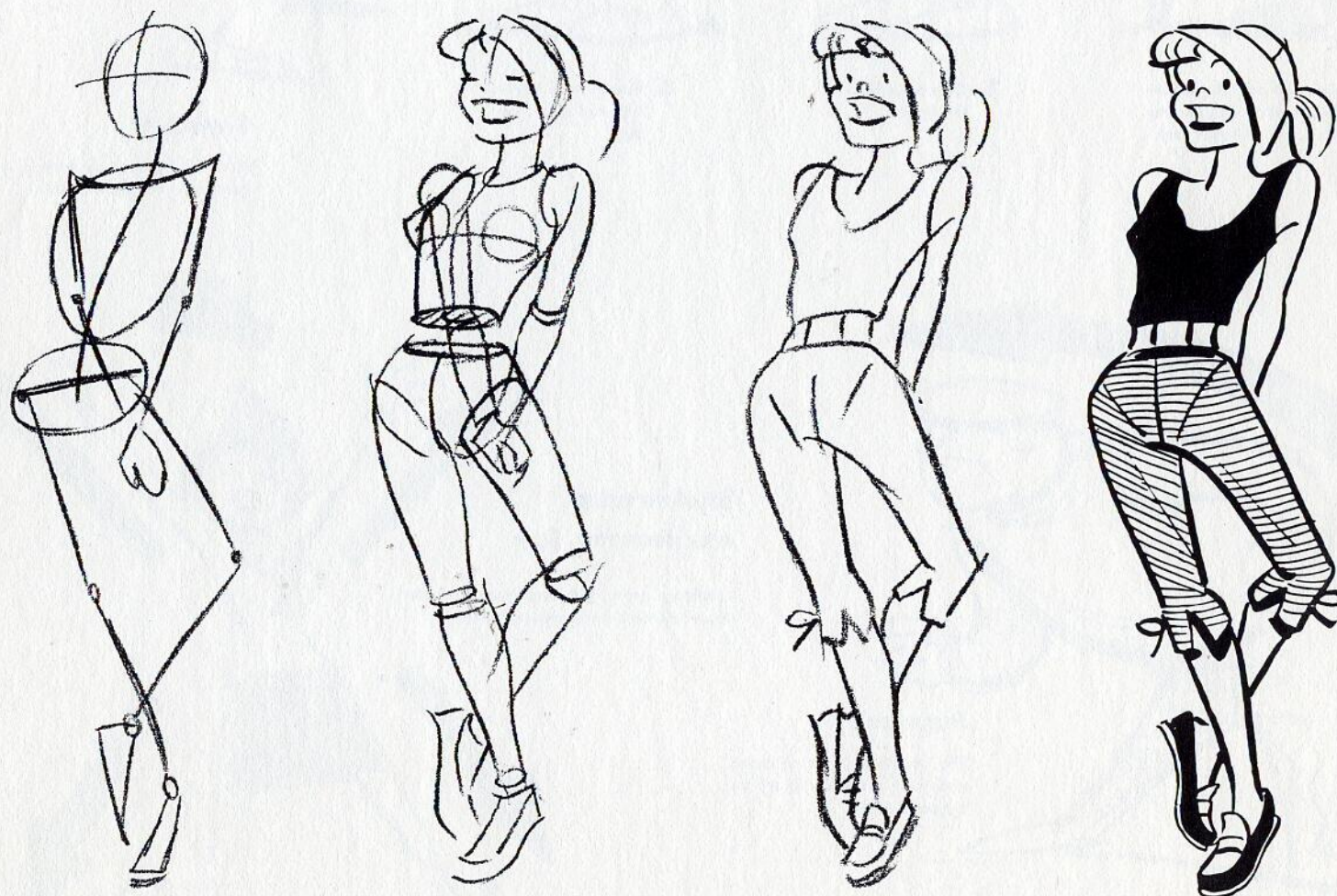
I wanted a pompous, large executive of a very small business. First, I set up a loose doodle around the stick figure, then came a more careful job of penciling. Outlines are inked in first, then come the patterns, details and shading



**Al Capp**

Li'l Abner progresses manfully from a stick figure to ink — think as you draw

Al Capp

**Harry Haenigsen**

Here's a development of Penny in action to prove that the stick figure method works

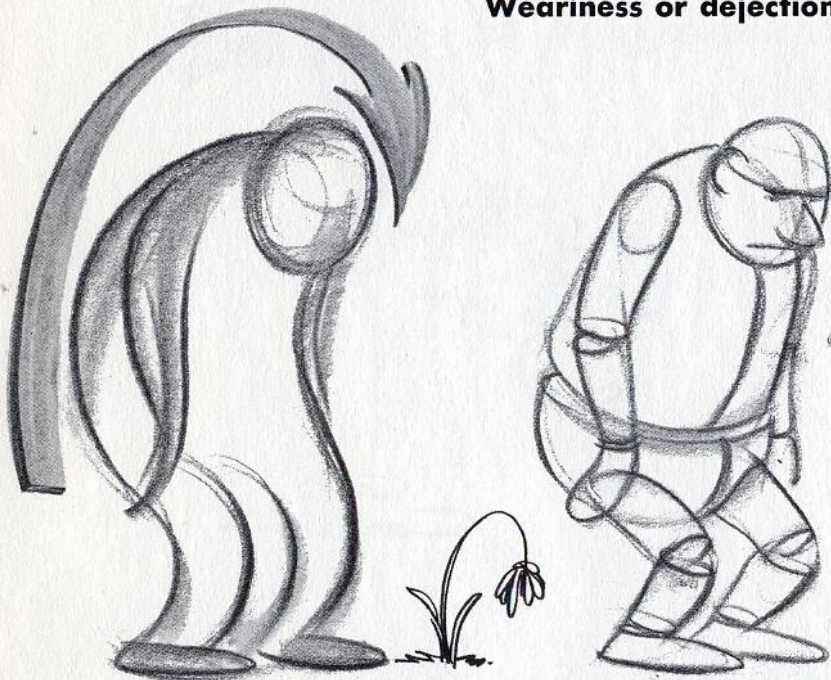


### Action and construction before detail

Details are important in giving character to cartoon figures, so the more observant you are of people the more successful your drawings will be. Make a practice of carrying a small pad and pencil. You'll find that once you've made a sketch, no matter how rough, you'll remember the details long after the sketch has been thrown away.

However, important as details are, they should not overpower the figure itself. Too often a beginner, eager to draw character-giving details, neglects the more important preliminary job of constructing the figure solidly and in appropriate action. Get the overall action of figure, hands, and feet solid and right before becoming involved with detail.

#### Weariness or dejection



1. Establish the overall gesture or action first. Note the drooping, wilted-flower look

2. Give solid form to the figure

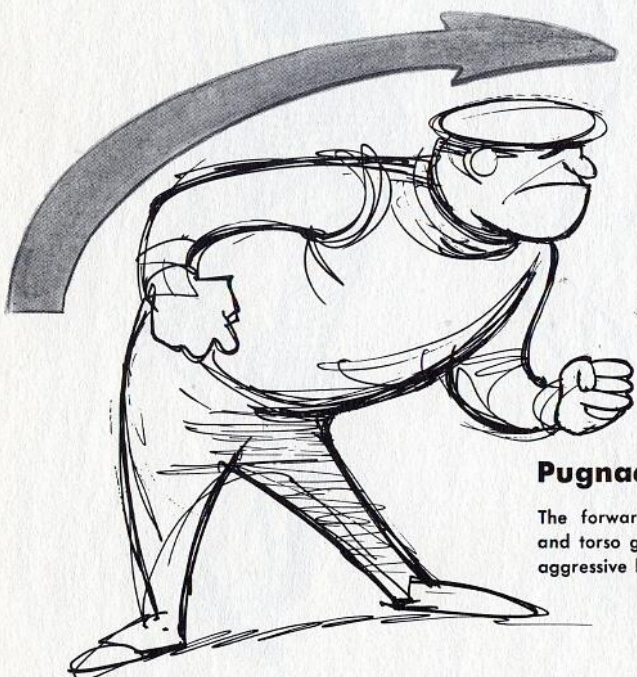


3. Finally add clothing and other details



#### Timidity

Here the figure pulls back to suggest fright or apprehension

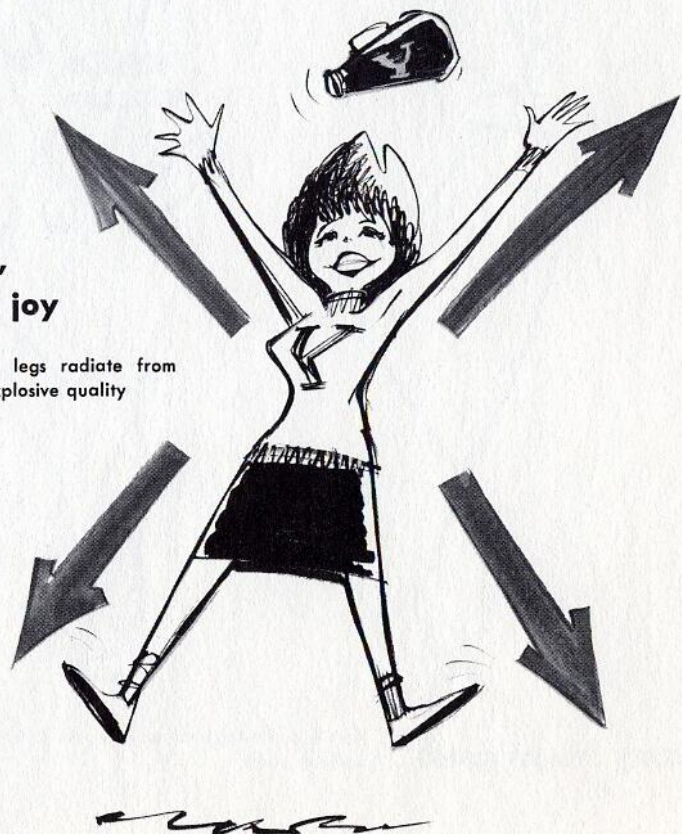


#### Pugnacity

The forward thrust of head and torso gives the figure an aggressive look

#### Exuberance, excitement, joy

Outflung arms and legs radiate from torso to create an explosive quality





## Hands

Look at any number of comic strips and you will have trouble finding a hand that follows true, anatomical construction. But every hand you see gives the *impression* of a real hand and not a lifeless wad of dough attached to the wrist. No matter how loosely he draws hands, a good cartoonist knows what a real hand looks like—and has simplified that knowledge for his work.

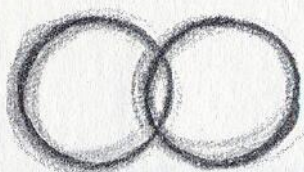
You don't have to go to art school to know what a hand looks like. You have two at the ends of your own arms. Use your own models over and over, either drawing them directly, or by look-

ing in a mirror. They'll show you the positions hands can assume. Then—with these pages as a guide—learn to *simplify* them.

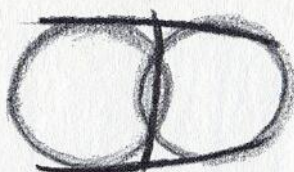
Follow the same procedure you did in drawing the entire figure: establish the overall shape and action before becoming involved with details. Think of the hand as encased in a mitten with all four fingers as a unit and only the thumb projecting from the palm.

In telling a story and showing expression, the hands are second only to the face, so you must learn to draw them in every action.

### Drawing the hand in mitten form



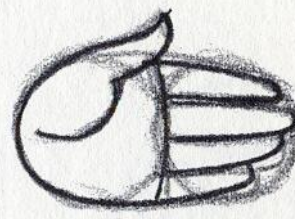
1. Draw two interlocking circles—one to represent the palm and the other the fingers



2. Draw tapering horizontal lines touching the edges of the circles and a curved vertical line between them



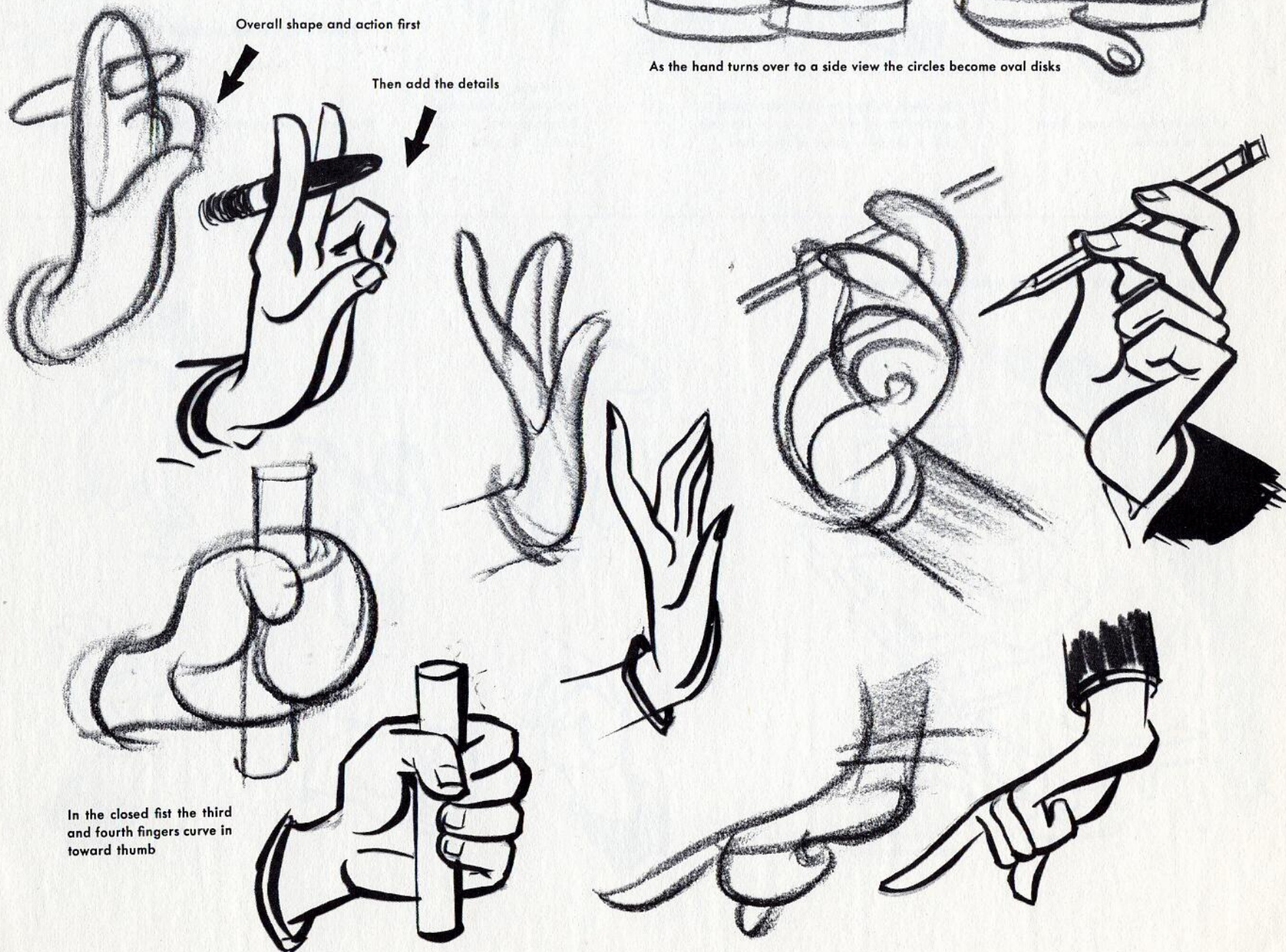
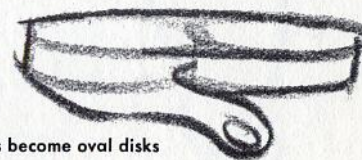
3. Add a thumb and you have the basic mitten shape



4. Complete the hand by drawing the fingers

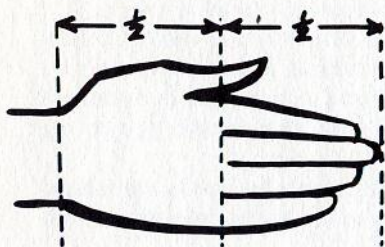


As the hand turns over to a side view the circles become oval disks





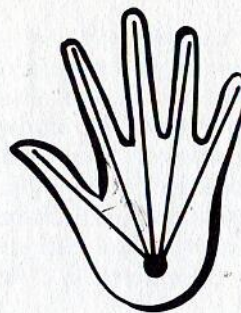
## Things to remember



Note proportion of fingers to the body of the hand



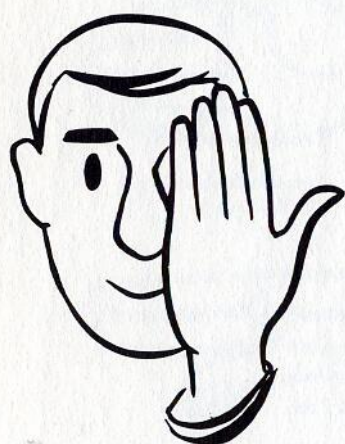
Each finger is a different length



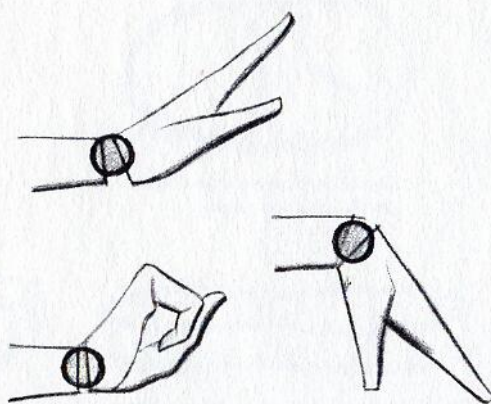
Fingers and thumb all radiate from the same point



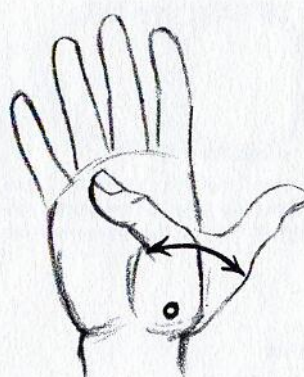
The fingers and thumb each have three joints



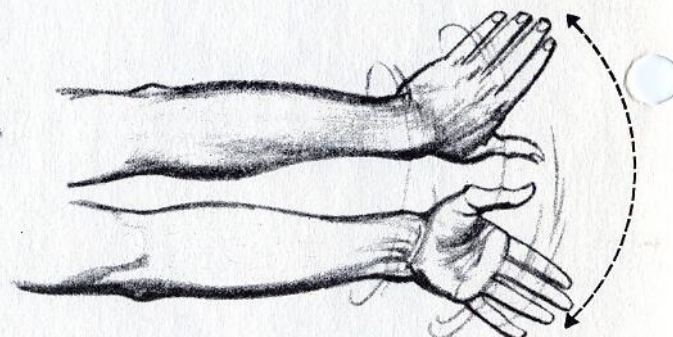
In size the hand reaches from chin to hairline



The great variety of wrist movements in combination with the action of the arm gives a complete range of movement



The thumb is attached to the wrist and swings independently of the rest of the hand



The hand in conjunction with the arm can turn completely around

## Use a mirror to study your own hands



Practice drawing 'em in every possible position and action

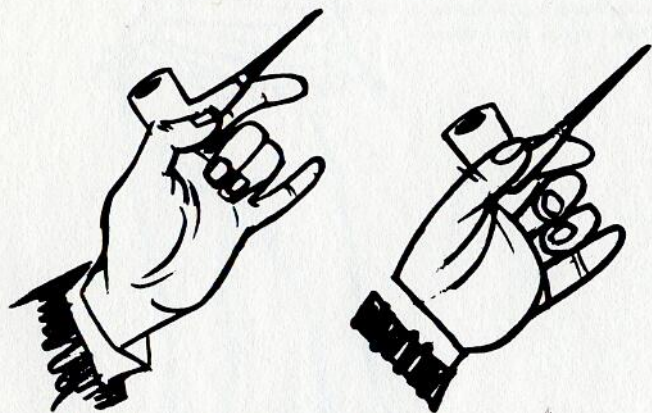




## Cartoon hands

In drawing cartoons, as in the old Chinese brush drawing, "it isn't what they put in — it's what they leave out." Good cartoonists simplify their hands — but you can't simplify until you understand the actual construction.

Don't ever kid yourself into thinking that a successful cartoon has been "tossed off" by the artist. Write this down in your little book of knowledge: Every line that has the appearance of careless informality is the result of the greatest care and past study on the part of the cartoonist who has drawn it.



Another example of simplification and exaggeration to give the hand more cartoon quality

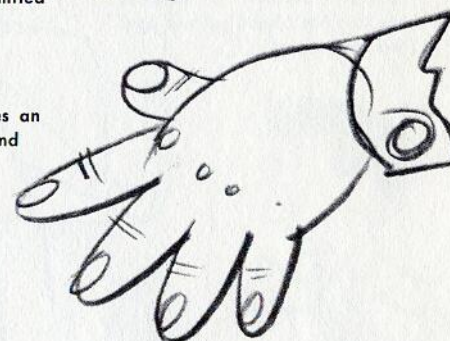


This detailed drawing would be fine in a cartoon showing a close-up view of the hand but otherwise it's a bit too complicated for an average cartoon



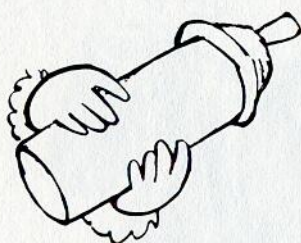
A simpler version of the same hand. Still fairly realistic but with most of the detail omitted

Further simplification of outline gives an exaggerated comic version of the hand

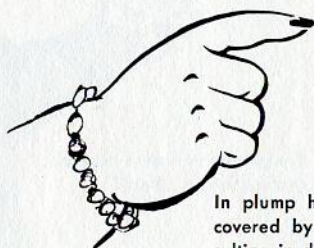


## Types of hands

Be sure to give the proper type of hands to your cartoon figures. The hands of a circus fat lady attached to the arms of an old-maid schoolteacher would look grotesque and out of place; an elderly gent's wrinkled and gnarled claws on a teenager would make your drawing look decidedly queer; and hands with slender tapering fingers, although fine for a hairdresser or piano virtuoso, would hardly belong to a stevedore. Always give your cartoon figures hands suitable to their character or occupation.



Infants' hands are small and chubby with short, pudgy fingers



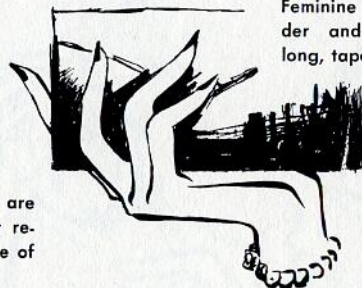
In plump hands, fingers are covered by layers of fat resulting in dimples in place of visible knucklebones



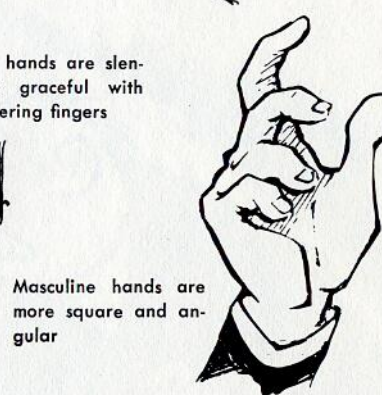
In youth, hands and fingers are smooth and rounded



In old age, bony protruding knuckles and wrinkled skin are characteristic

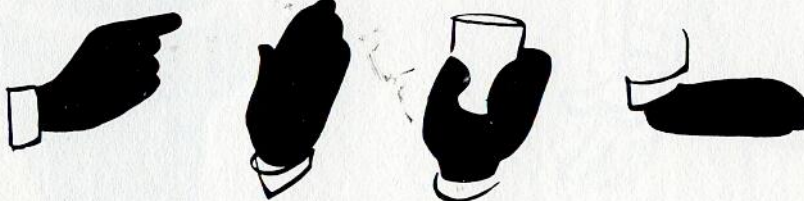


Feminine hands are slender and graceful with long, tapering fingers

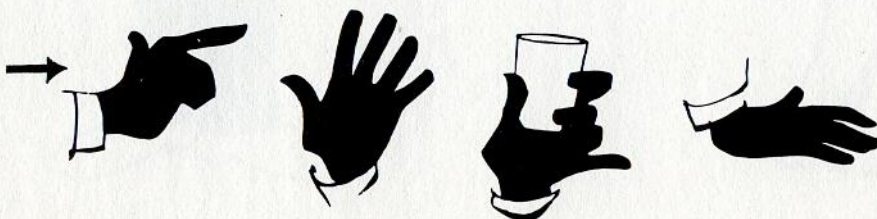


Masculine hands are more square and angular

Wrong →



Right →

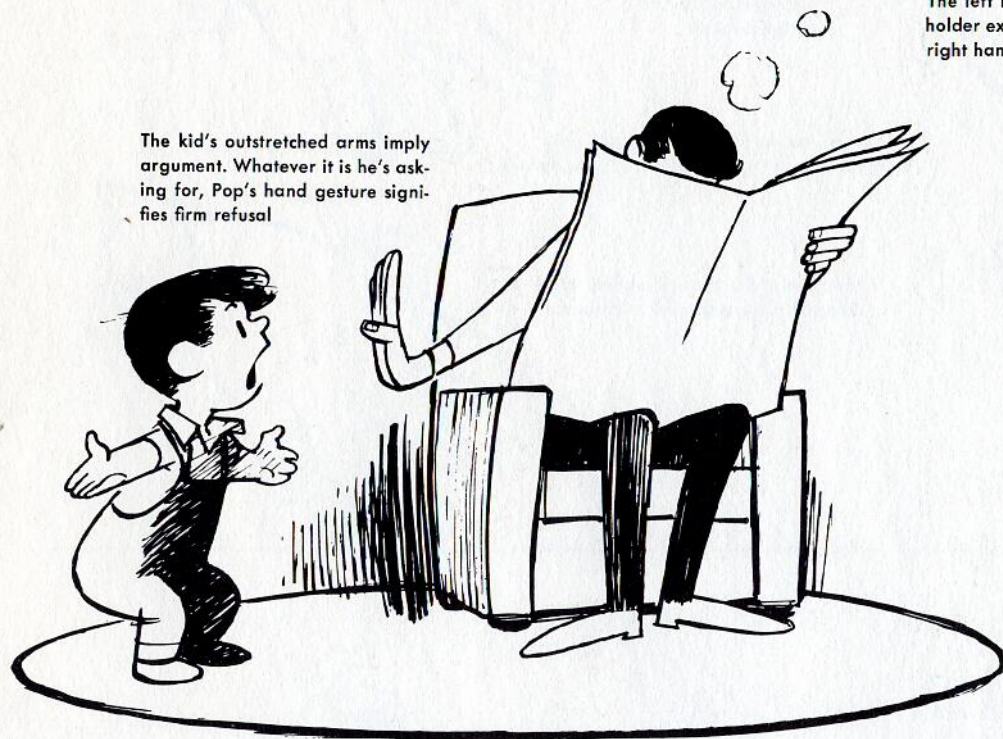


It helps to think of how your hands would look if you blacked them in solidly like a silhouette. The eye catches the meaning of a gesture more quickly if the fingers are spread out a bit. At left, note how the hands above are stagnant in silhouette — and how much more expressive the lower ones are with the fingers spread

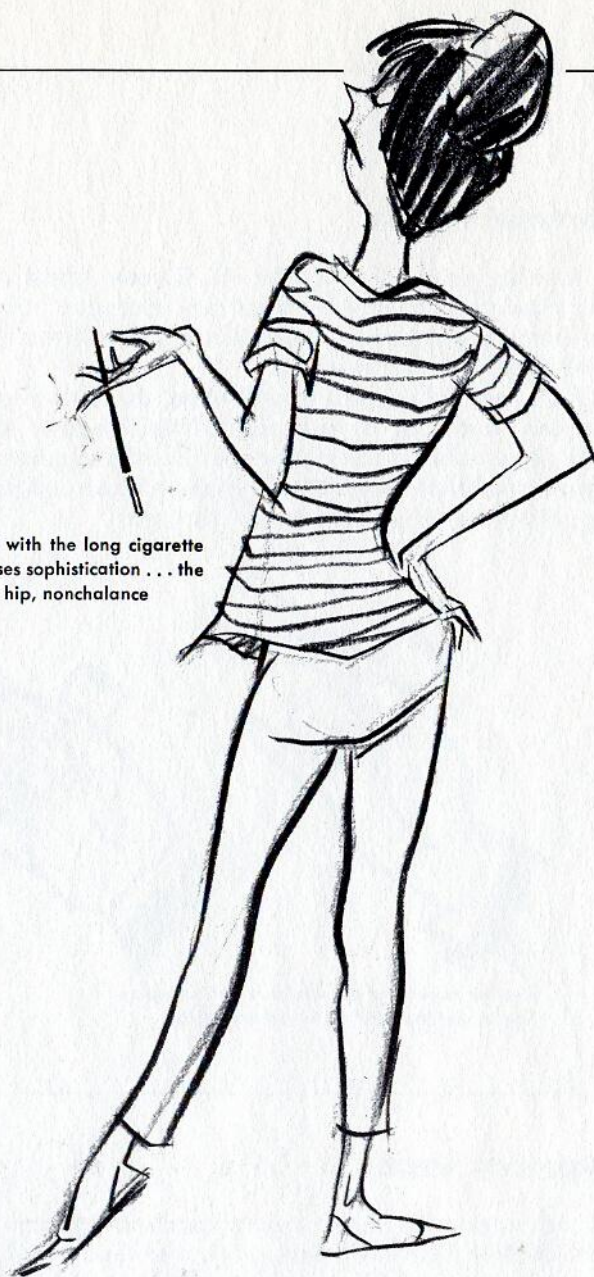


### Hands help tell a story

After the face, the hands are the most expressive part of the human body. Even a hand hanging loosely at the side adds something to a cartoon if it was properly "felt" by the cartoonist. Watch hands and their movements — and when you draw them, try to "feel" what they are doing. Even when they are not to be in motion, give hands a fair amount of thought as you draw them. Don't just put them in as a matter of course. Hands express character and add greatly to humor.



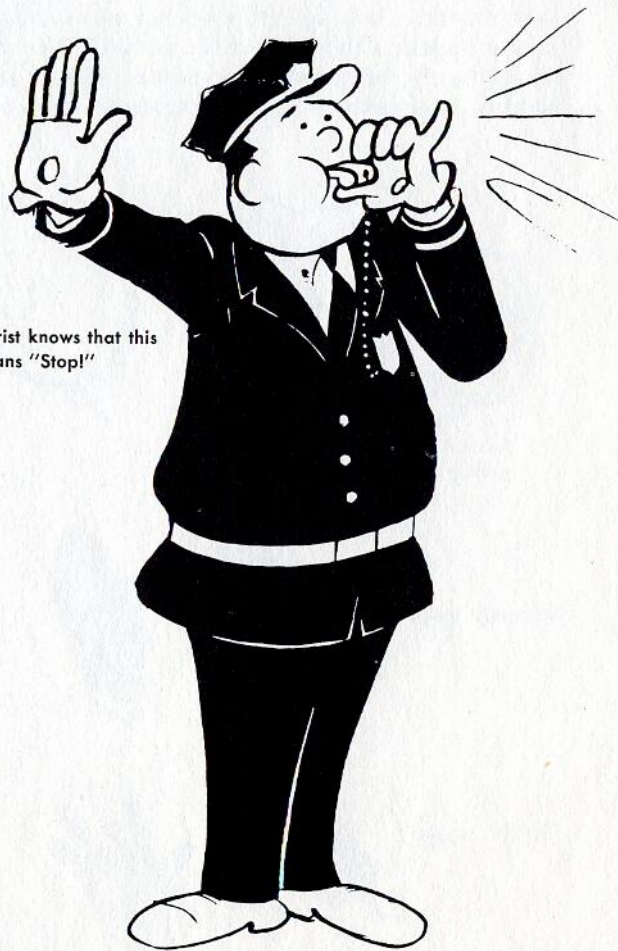
The left hand with the long cigarette holder expresses sophistication ... the right hand on hip, nonchalance



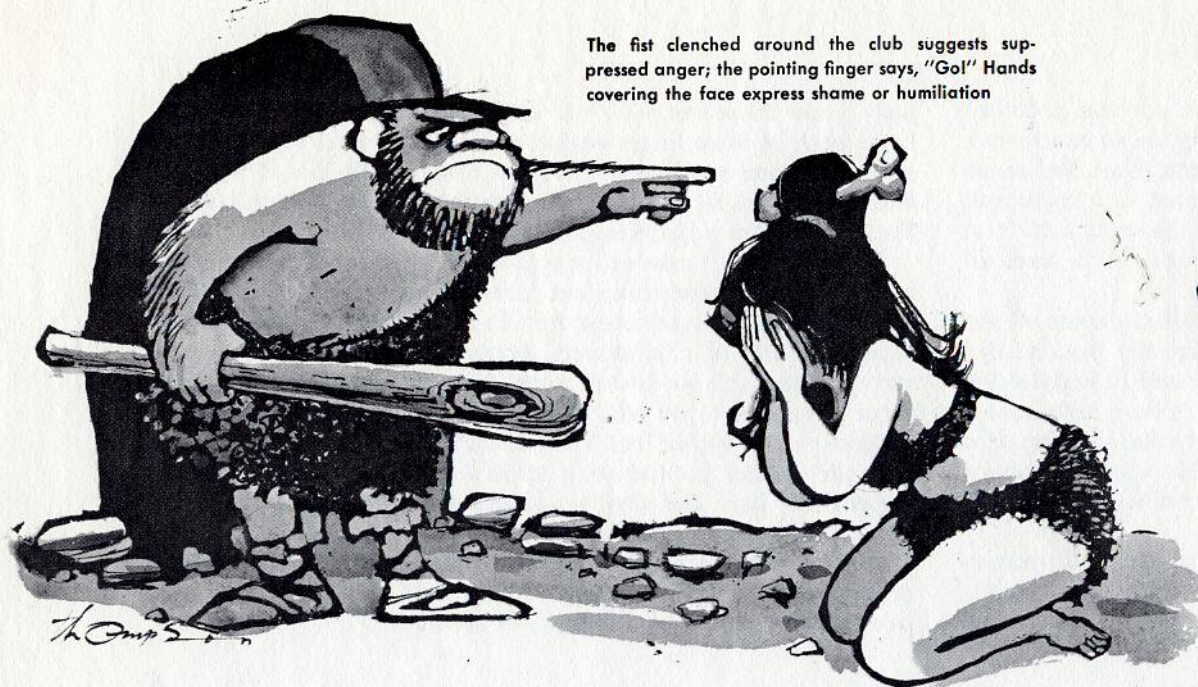
The forefinger of the boss stabs the clerk accusingly. The outturned palms of the employee say, "Honest, Boss, I didn't do it!"



Every motorist knows that this gesture means "Stop!"



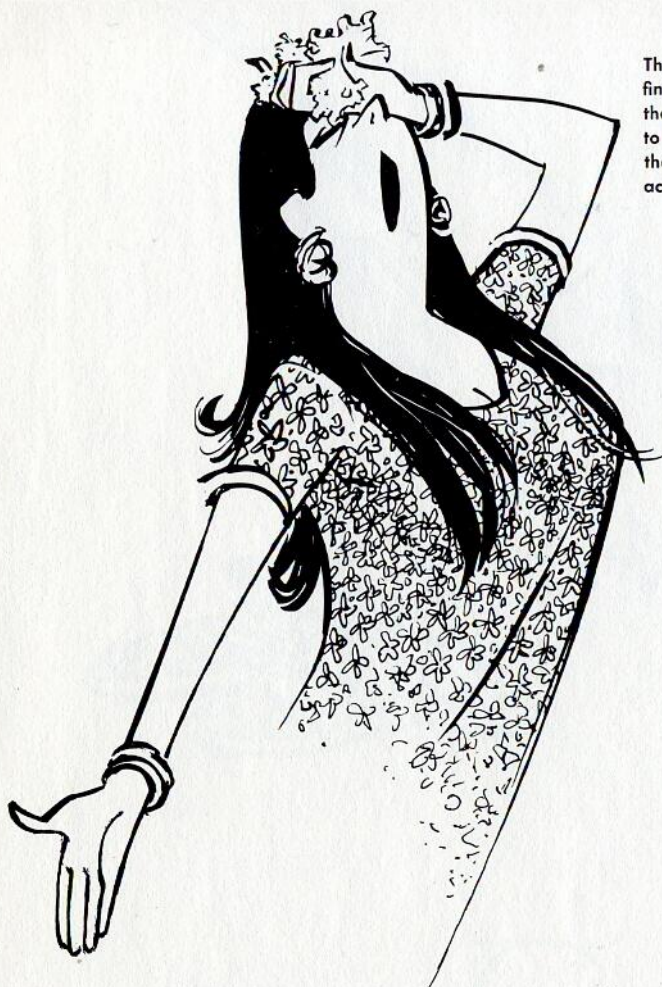




The fist clenched around the club suggests suppressed anger; the pointing finger says, "Go!" Hands covering the face express shame or humiliation



The upraised hand warns members of his congregation that their conduct is observed from on high while the left hand points out their destination unless they mend their ways



The back of one hand to the forehead, fingers clutching a lace handkerchief, and the palm of the other beseeching witness to her agony testify that she belongs to the "Oh, the pain of it all!" school of acting



One hand supporting an elbow and fingers of the other to the lips signify that he's pondering a weighty problem



The wagging thumb states he's willing to accept a lift from anyone traveling in the indicated direction



See, observe and remember the hand actions of the people around you



## Feet and shoes

There is something about bare feet that is not too pleasant. Women manicure their toenails to give the big toe an exotic look when it is seen sticking out the end of openwork shoes. But somehow a toe is a toe and is pretty closely associated with corns and bunions. A woman's foot, when covered by a sheer stocking and lifted to graceful heights by a long, thin French heel, loses all suggestion of the chiropodist's surgical touch.

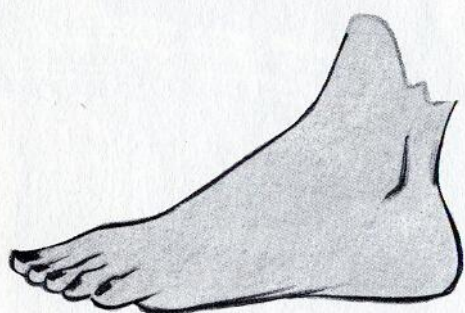
Miss America may wear a scanty bathing suit to expose all the anatomical points on which the experts judge her beauty. But you will notice that her trotters are neatly encased in high-heeled shoes that hide her unsightly toes from view. A bare high instep, when exposed to the eye, is merely bony protrusion that happens to be located somewhere below the ankle. But when this sharp mound is partly covered by the graceful curve of a stylish shoe it becomes the essence of pedal allure.

There are few occasions when the cartoonist is called upon to draw bare feet. But he must not ignore the feet in their natural state. He must, as in the case of hands and other parts of the

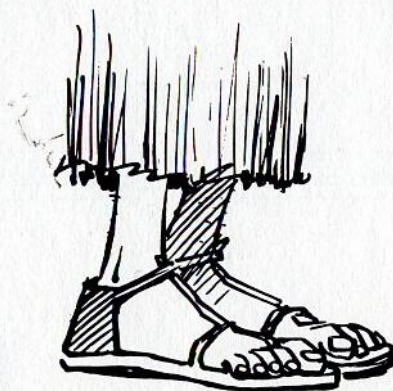
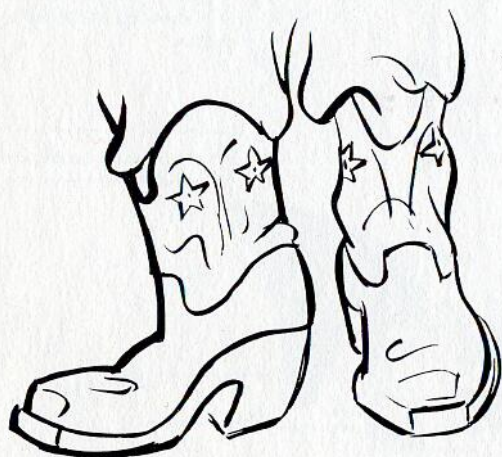
body, know those feet as he knows his brothers and sisters. In the beginning, he must linger with the chiropodist over each toenail and anklebone and learn what the things look like. He must know what's inside the shoe, whether that shoe be a high-heeled French model or a battered pair of Father's slippers.

The cartoonist's mission, as related to the things we stand on, is to draw shoes rather than feet. Drawing shoes is an art in itself. Linger long in front of shoe-store windows. There you will see an infinite variety of clodhoppers, boots and doghouses that will serve you well in your future work. When you get down to using them in cartoons, you will learn to put big shoes on small feet and little shoes on big feet. You will have fun ripping the uppers from the soles so that toes stick out in sly embarrassment or showing entirely bare and unadorned pedal extremities in all their knobby majesty.

Shoes are the cartoonist's delight. They have plenty of character. They can be funny or beautiful. And they can play a big part in expressing the personality of the figure.



Even Miss America's foot  
is just a foot until  
it is dressed



By their footwear ye shall know them



## Action of the feet

One of the great advantages of being a cartoonist is that you are not limited by set rules governing what the human figure can or cannot do. This applies to feet as well as to other parts of the body. In the drawings on this page you see the limited action of a real human foot. This action is further limited by the shoe, which inhibits the ability of the toes to bend upward or curl under—both very expressive actions.

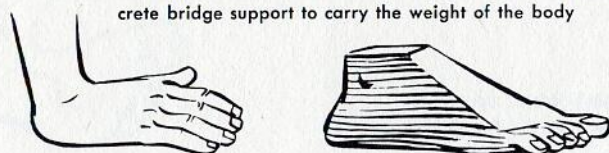
Many a good action cartoon is spoiled because the feet are too set or stiff, so, when it is called for, try to give the feet expressive action by a little exaggeration. However, exaggerate only such actions as the foot actually can perform, or your cartoon figures

will appear to have their pedal extremities awkwardly out of joint.

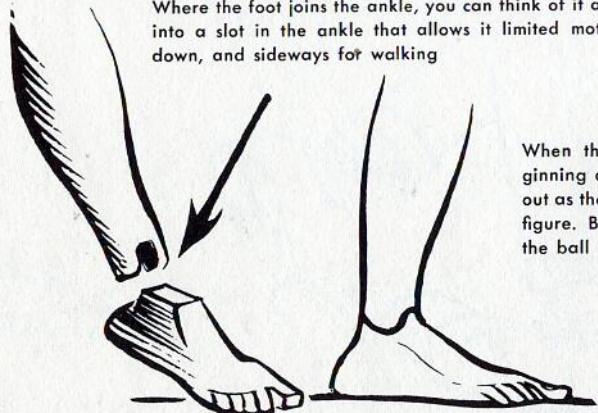
Don't overlook the bottoms of shoes. A man running away from you will show the bottom of the foot that is behind. There is a lot of "feeling" to the bottoms of shoes. When a man is knocked down he looks really out if you show him with his feet toward the reader, and the bottoms of his shoes toed in.

Regardless of how you draw shoes, remember they must fit the rest of the character. Don't draw the same kind of shoes on all of your characters. Notice that your friends don't wear the same kind of shoes.

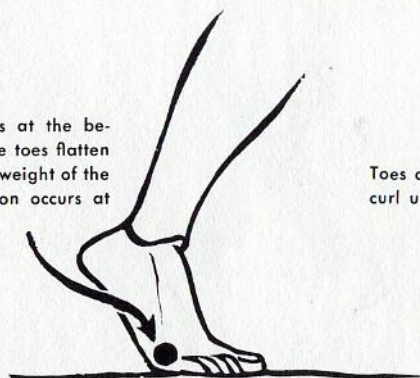
The foot is similar to the hand except that it is built like a concrete bridge support to carry the weight of the body



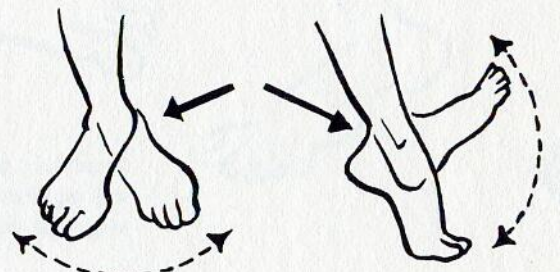
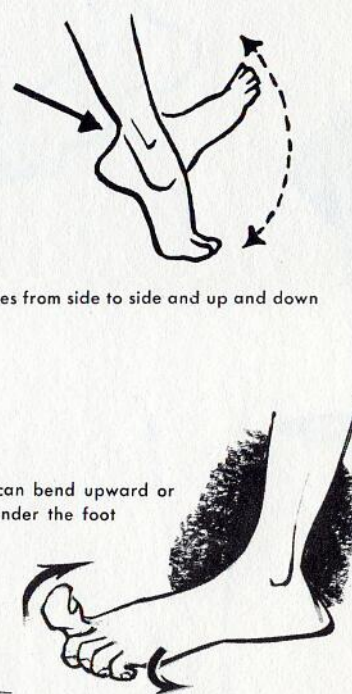
Where the foot joins the ankle, you can think of it as fitting into a slot in the ankle that allows it limited motion up, down, and sideways for walking



When the heel rises at the beginning of a step the toes flatten out as they bear the weight of the figure. Bending action occurs at the ball of the foot



Toes can bend upward or curl under the foot



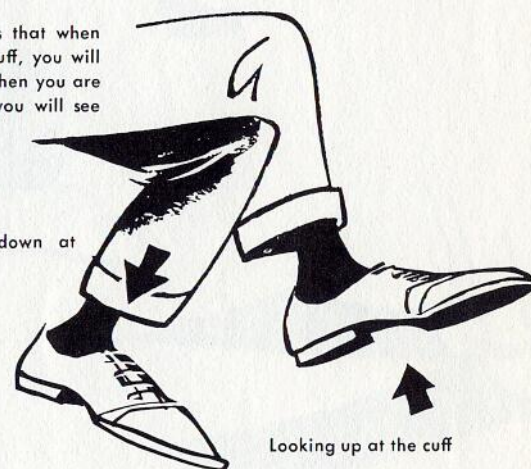
The foot moves from side to side and up and down

## Cartooning the foot

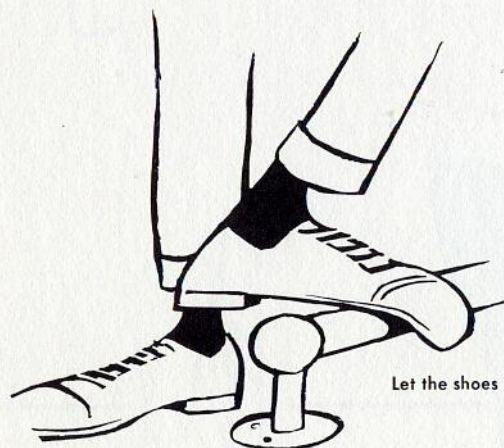
A good rule to follow is that when you see the top of the cuff, you will see the top of the foot; when you are looking up at the cuff, you will see the bottom of the foot



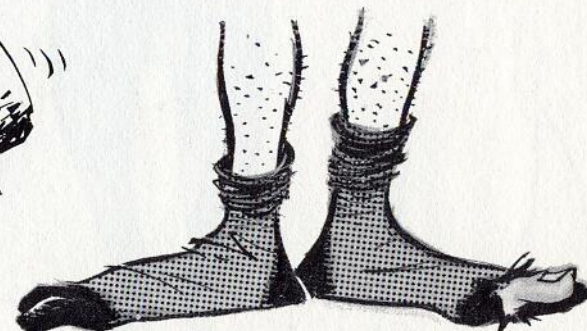
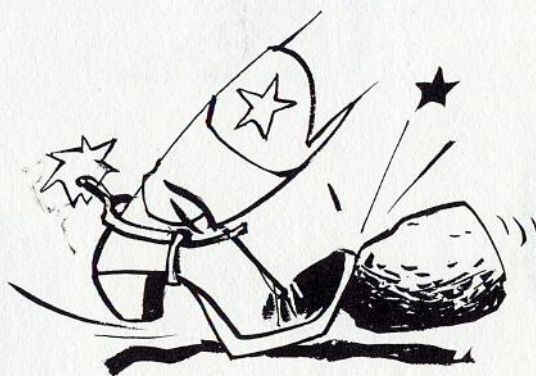
Looking down at the cuff



Looking up at the cuff

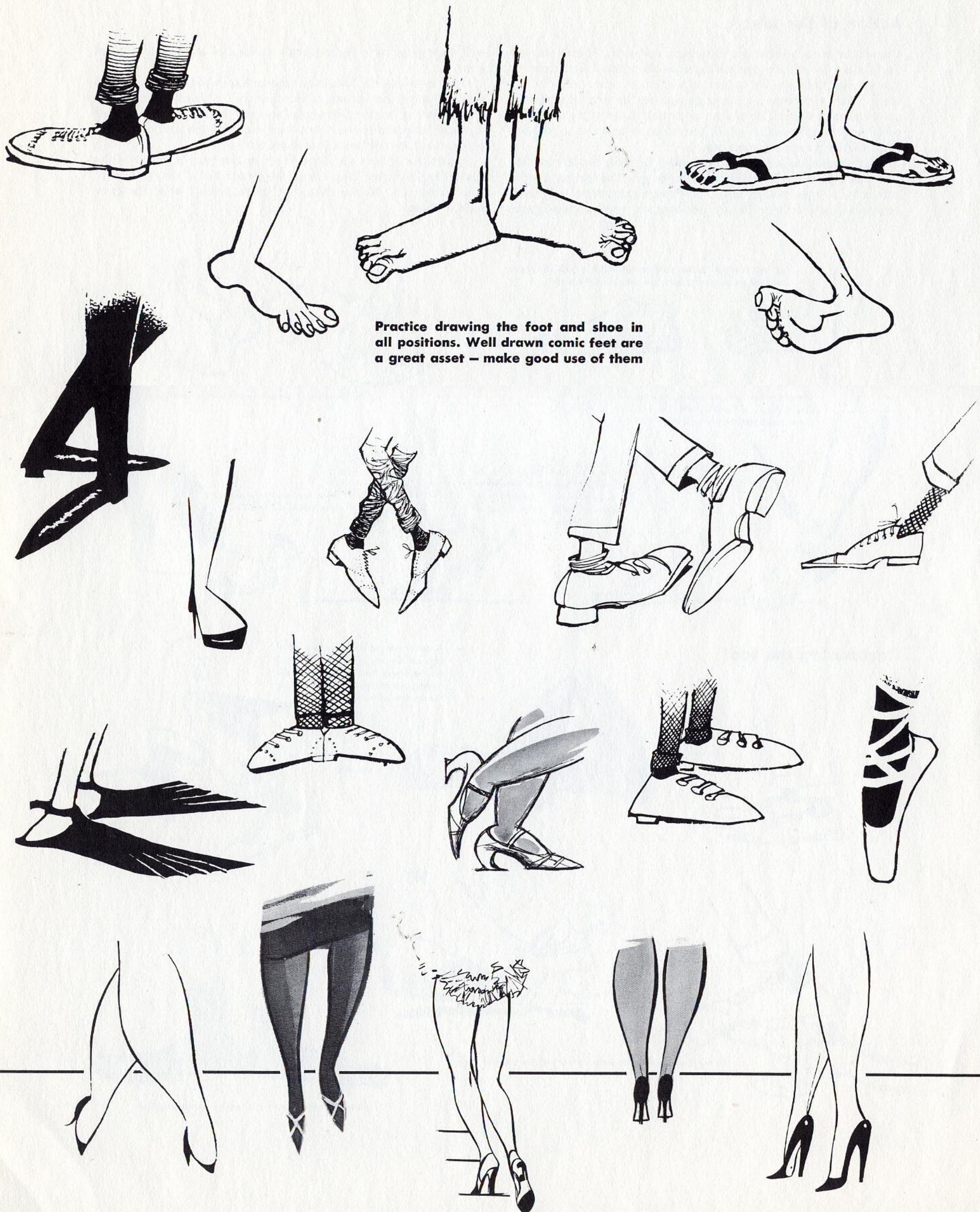


Let the shoes perform the same actions that the toes can



A man is defenseless — and funny — in stocking feet







FAMOUS ARTISTS CARTOON COURSE  
Student Work  
Lesson 5

To study and practice

In this lesson you learn to draw hands and feet -- the two most important details of any figure. After the head, the hands and feet come next in adding expression to your figures. There is a hand gesture or a foot gesture to go with every facial expression and figure action. Learn to use these gestures effectively in your cartoons. Never be careless about hands and feet.

Practice copying the hands and feet in the text until you are sure of their structure. It's also a good idea to use your own hands for models, either directly or as seen in a mirror. The skillful drawing of hands and feet is so important to your future as a professional that we can't overemphasize the need for spending plenty of time on them.

The following assignments give you your first crack at drawing a complete panel picture for criticism. From now on, when you practice, rule panels first and keep your figures inside them. (It will be of help to you at this point to look ahead and give some study to Lesson 11.) Try for eye-pleasing relationships between your figures and the space they occupy. However, we will grade these assignments on the basis of how well you have understood and used the information in Lesson 5. Do both of them in ink.

The assignment you are to mail to the School for criticism

ASSIGNMENT 1

On a sheet of 11 x 14-inch Bristol board, draw a panel 10 inches high and 8 inches wide, neatly centered on the page. In this panel draw a man leaning forward to ring a doorbell with one hand and holding a package or any small object in his other. Make the figure action and facial expression as animated and interesting as possible. Keep the background simple.

IMPORTANT -- Mark this sheet ASSIGNMENT 1.

ASSIGNMENT 2

On another sheet of 11 x 14-inch Bristol board, draw a panel 8 inches high and 10 inches wide. In it draw a man wearing shirt and trousers, seated on a stool with his legs crossed. One hand holds a book he is reading, the other a cigar or cigarette. Try to make the action of his hands and feet as expressive as possible.

IMPORTANT -- Mark this sheet ASSIGNMENT 2.

Present your assignment in the same clean, professional manner you would use if you were submitting it to the cartoon buyer of a publication. Letter your name, address and student number carefully in the lower left-hand corner of the page. In the lower right corner, place the Lesson Number. Mail to:

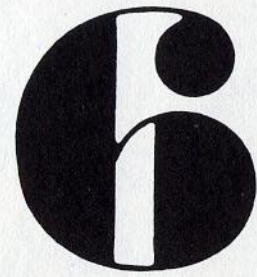
FAMOUS ARTISTS CARTOON COURSE  
Westport, Connecticut



**Famous Artists Cartoon Course**  
Westport, Connecticut

# **Anatomy**

Lesson



Rube Goldberg

Milton Caniff

Al Capp

Harry Haenigsen

Willard Mullin

Gurney Williams

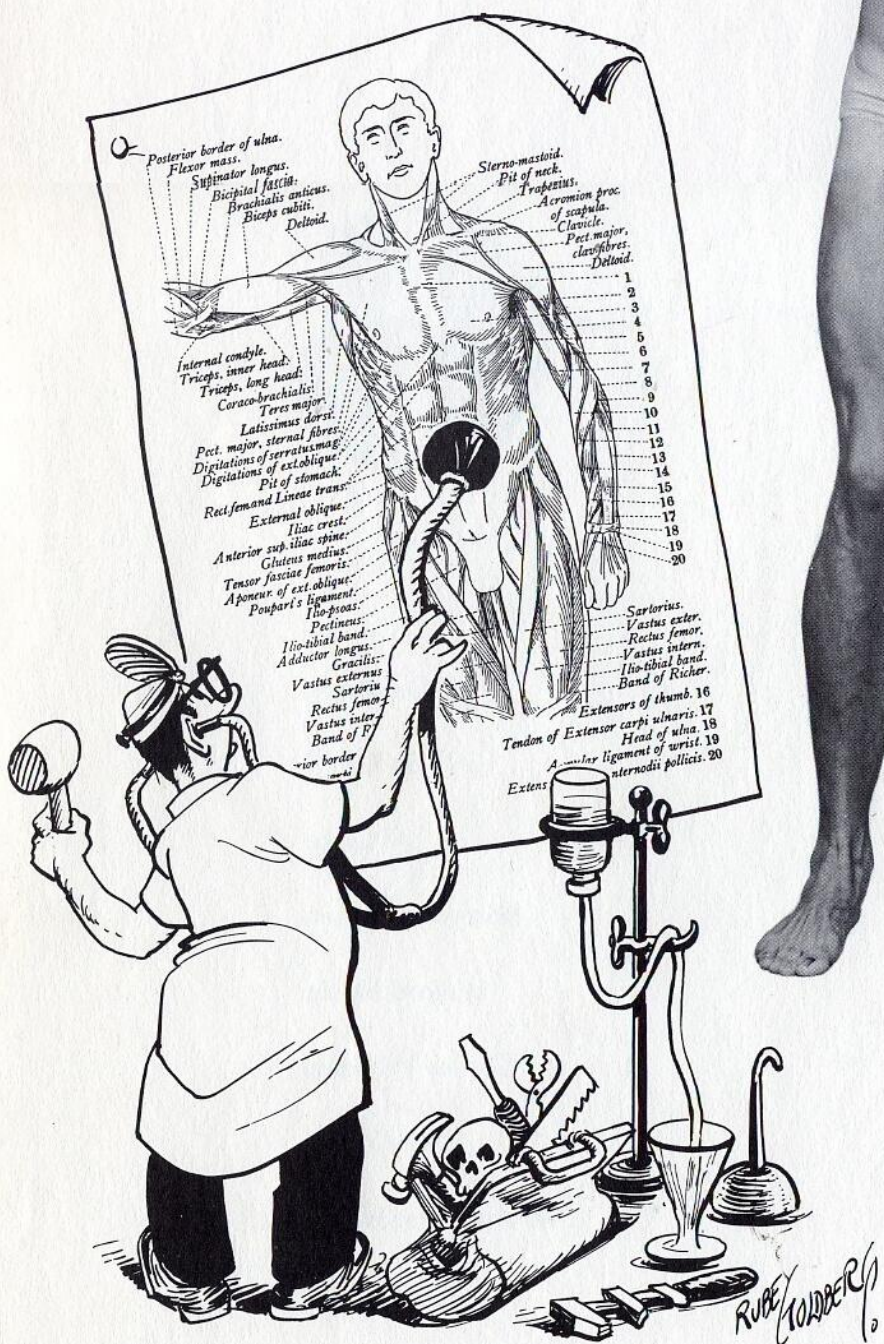
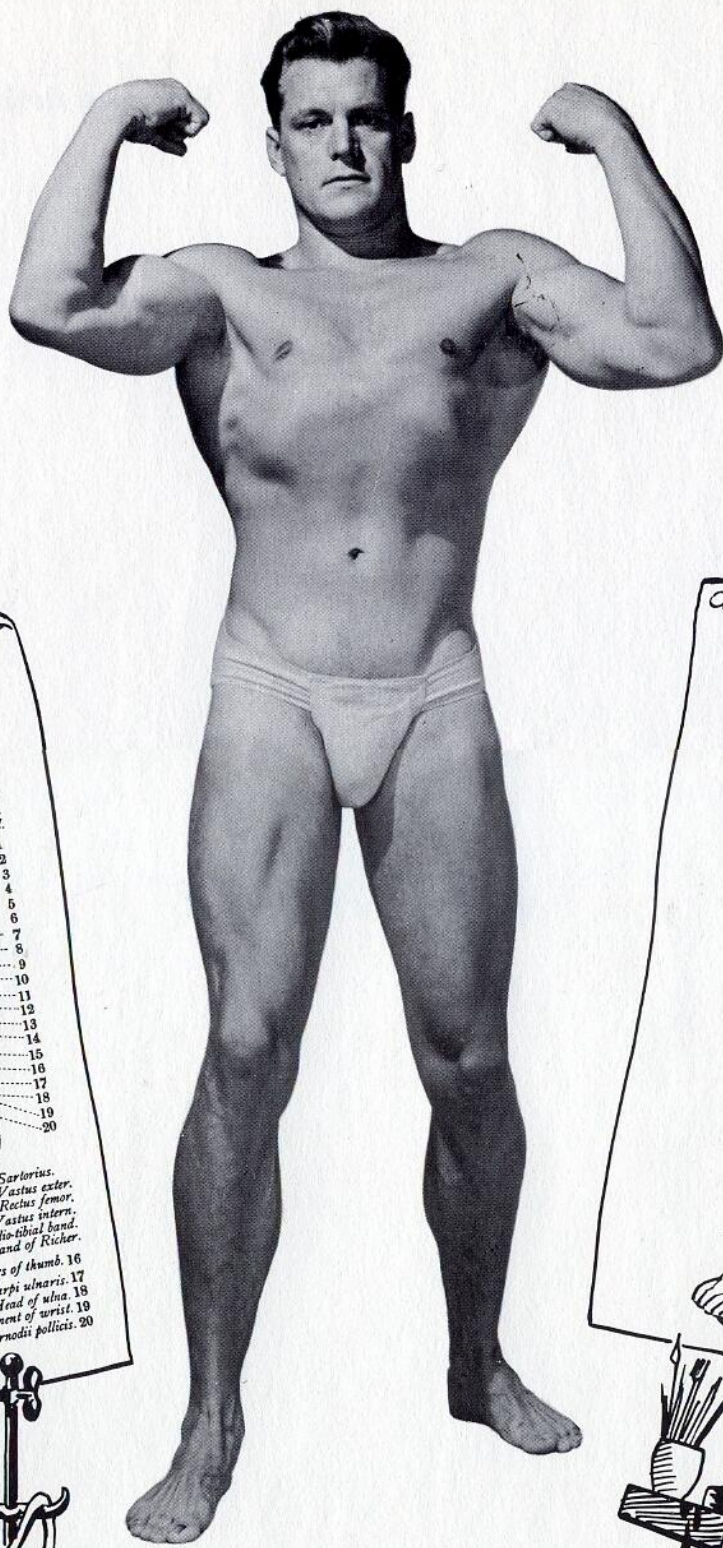
Dick Cavalli

Whitney Darrow, Jr.

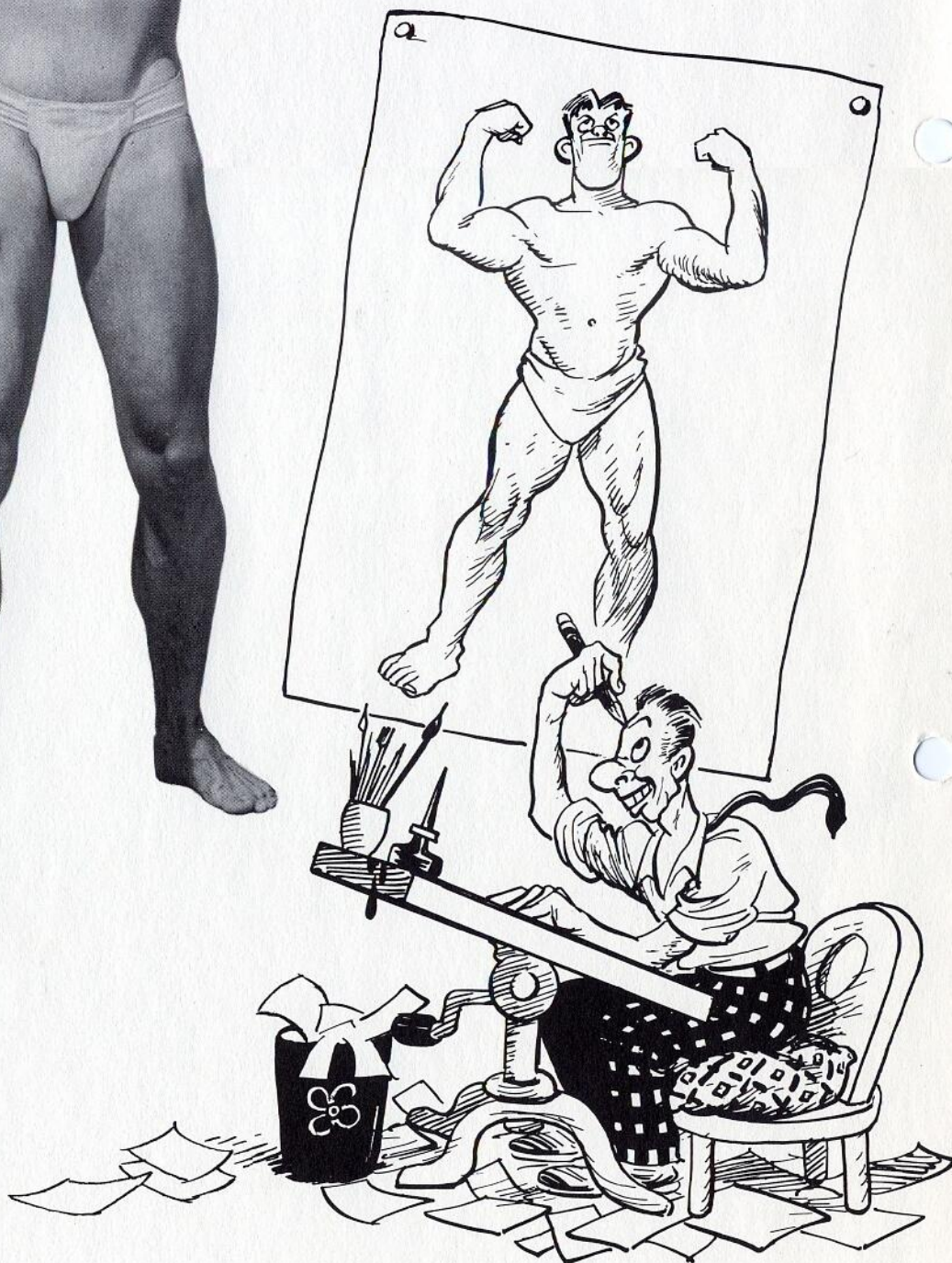
Virgil Partch

Barney Tobey



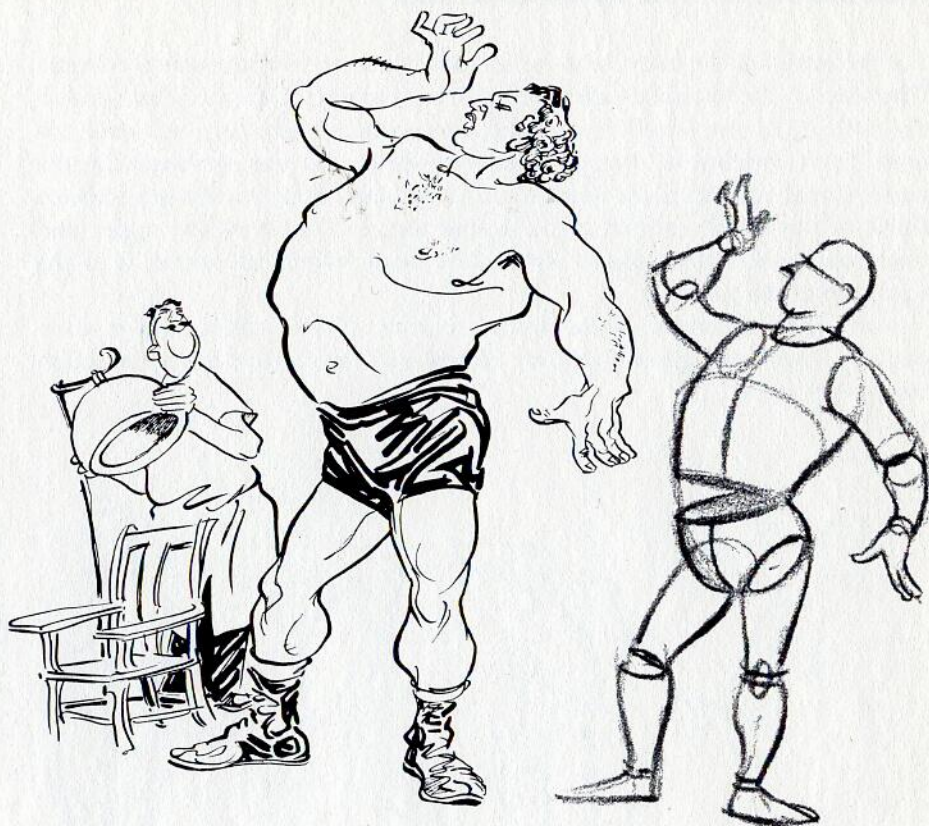


You are not a medical student and will never be called upon to operate, so let's skip all of the big names. Instead—



— let's concentrate on the four groups of muscles that you will need in creating comic characters





## Anatomy for cartoonists

Faced with the study of anatomy, some students start wondering why they didn't take up plumbing or cost accounting. But learning a little true anatomy needn't be that tough. As cartoonists, we are concerned with the outward form of the human body. We leave the liver and lights to the medical students and concentrate on what makes a person's outside look the way it does.

Cartooning in general falls into three classifications. First, we have the true-to-life or adventure-type drawing such as is practiced by Milton Caniff. Let's face it — with this type of drawing the artist must have a good knowledge of anatomy and use it. Because the characters are realistic, their actions are limited to what a real human body can do.

The second style of drawing is best exemplified by the work of Harry Haenigsen in his "Penny." In this style, the artist simplifies the human form, but still maintains most of the true figure proportions, and appearance and dress are realistic. He can exaggerate the action of the figures and, if he wants to do it, he can add real comic-style characters without having them look out of place. Al Capp uses this style in his work and he never hesitates to add characters of a wildly comic type to his drawings. A great advantage of this style is the freedom it gives for using the sexy girl figure without the realistic male companion. A goof with a doll often makes the doll look better.

The third style of cartooning is the old school of true comic art. Exaggeration of form and action is unlimited. This is the original comic style and is still very popular. The Katzenjammer Kids, Snuffy Smith and Barney Google, Blondie and the many "animated" style strips all fall into this classification.

Both Willard Mullin, with his sports cartoons, and Rube Goldberg, with his political cartoons, are masters of all three styles and use all three in their work. Willard Mullin may draw a true portrait of a baseball player and then surround the drawing with little figures that would fall into the comic class. Politi-

cal cartooning calls for a true-to-life style of drawing, but Mr. Goldberg often finds that he can put across a very serious idea by the use of a truly comic character. You will notice, however, that each of his comic figures must have a human quality, no matter how exaggerated he makes it.

Regardless of the style of drawing that you do, there is one important thing to remember: all forms, including the human form, have three dimensions — width, height and depth. Everything, from a sheet of tissue paper to an elephant, is a solid. The figure, whether comic or realistic, must have depth. You are working on a flat surface and automatically get height and width, but the third dimension of depth must be an illusion that you create with your pen or brush. By studying the sphere and cylinder and drawing them in all positions, you will find it simple to transfer this knowledge to your figures.

Stack up your spheres and cylinders in the right order and they will make a human being. The basic forms of spheres and cylinders are covered in varying amounts by muscles. For cartooning we have simplified the muscles for you, too. Instead of countless muscles we have broken them down into four groups — the chest, back, arm, and leg muscles. We are concerned with the outside appearance of the human, so we need only study those muscles that have the greatest effect upon the outside of the form. Both male and female have muscles, but remember that the female hides hers under a smooth exterior and they don't show as much as the male's.

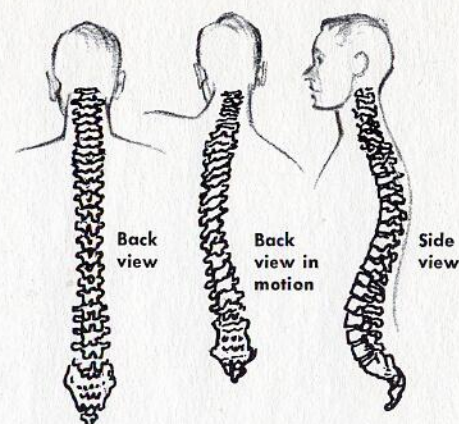
Because we speak lightly here of anatomy for the cartoonist, it doesn't mean that it has little value. The better your understanding of the human figure, the better equipped you will be for satire. The main thing is not to become so mired in the study of the bones and muscles that you forget why you started to study them in the first place. Cartooning is a light form of art — not a science. But it doesn't hurt anybody to look under the hood of his car once in a while to see what makes it run.



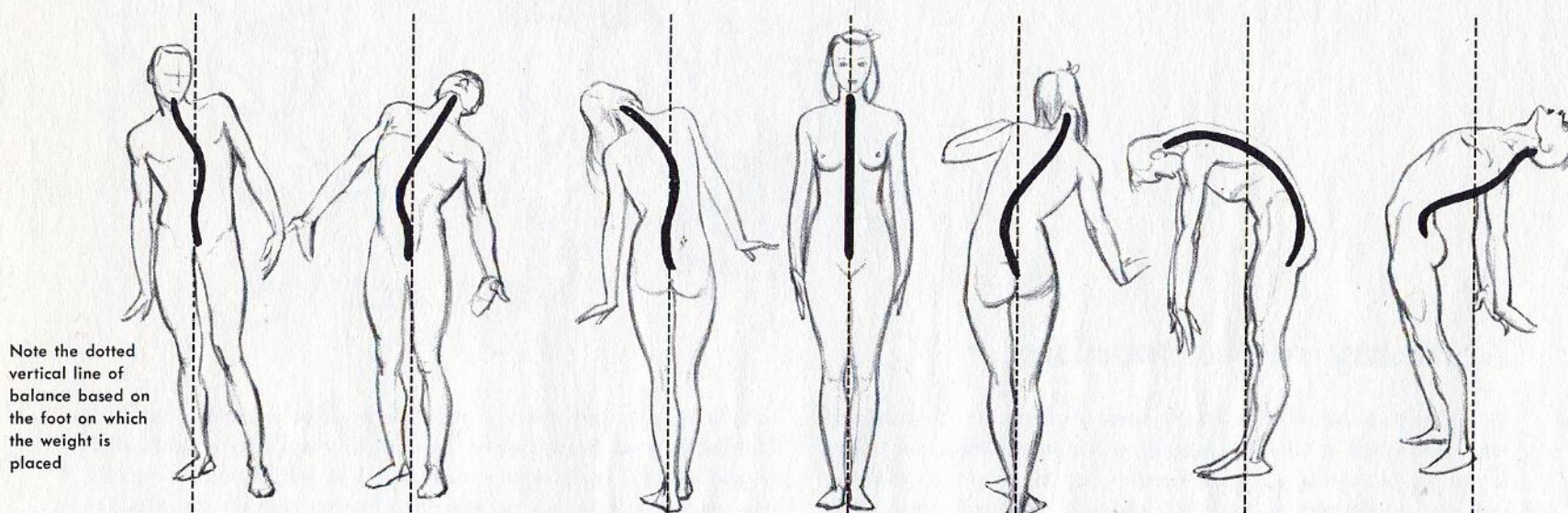
## Movement of the spine and body

For the action of the body, look for and study the curve of the spinal column. The slant of the shoulders and hips and the turning of the body are due to the twisting of the vertebrae or small bones which make up the spinal column. Each vertebra of the spine moves a little, and the movement in the entire spinal column is the result of all these many little movements. Always think of the spinal column as the connecting rod between the upper and lower portions of the torso as well as the head, which, of course, is at the upper tip of the spine.

Study the movement of the spinal column. If you understand it thoroughly, it will add greatly to your ability in drawing the figure in action from every angle.

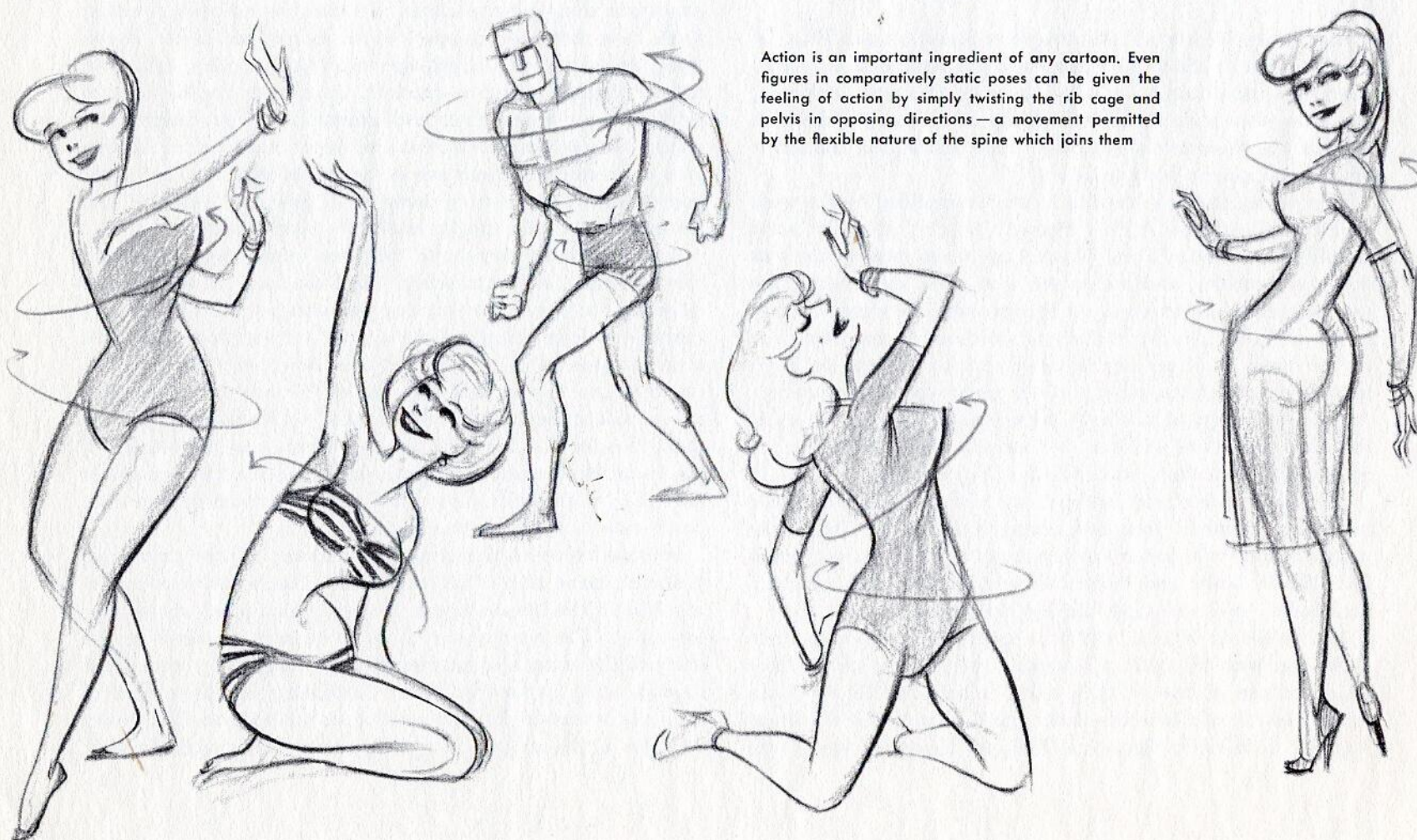


The spinal column is made up of many vertebrae, each of which moves a little, making up the entire movement of the spine



Note the dotted vertical line of balance based on the foot on which the weight is placed

Action is an important ingredient of any cartoon. Even figures in comparatively static poses can be given the feeling of action by simply twisting the rib cage and pelvis in opposing directions — a movement permitted by the flexible nature of the spine which joins them



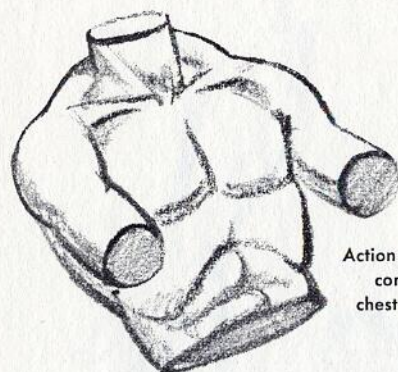


## Back and chest muscles in action

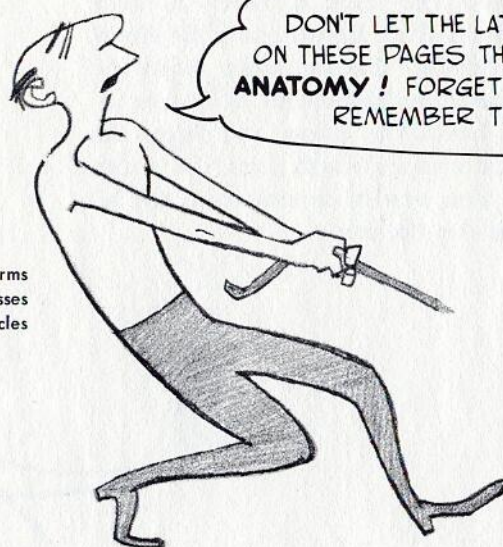
There are a great many muscles in the human frame — some large and apparent to the eye, others small and hidden. The cartoonist, fortunately, doesn't have to know all of them — he needs to be familiar only with what occurs to the large groups that show on the surface when the figure performs different actions. The twisting, thrusting or pulling of any part of the figure causes muscles to assume different shapes and positions.

In strong pulling or twisting actions the muscles stretch taut and become longer and flatter. In pushing actions they become compressed and tend to bulge. Apply these two principles to make the actions of your cartoon figures more convincing.

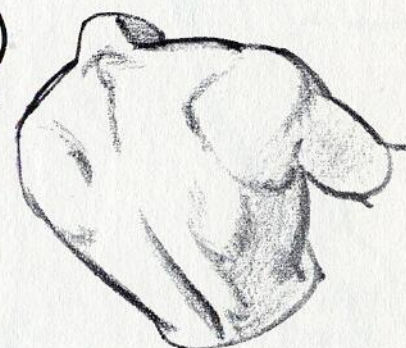
On this and the following two pages we show you realistic drawings of the muscles, and how these muscles might be suggested in cartoon figures.



Action of arms compresses chest muscles



Shoulder blades pull away from spine

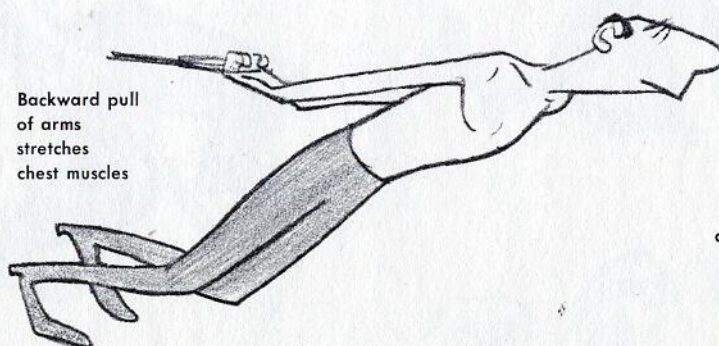


In the strong pulling action above, each shoulder blade (scapula) is pulled away from the spine. The covering

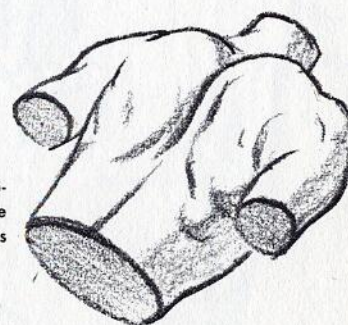
muscles (trapezius) are stretched almost flat. In contrast, the chest muscles are compressed and appear bulky



Backward pull of arms stretches chest muscles

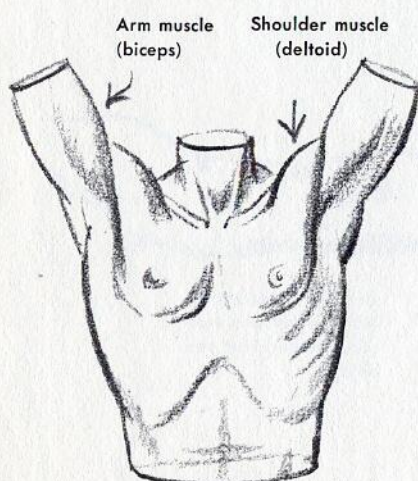


Note pronounced bulge of back muscles



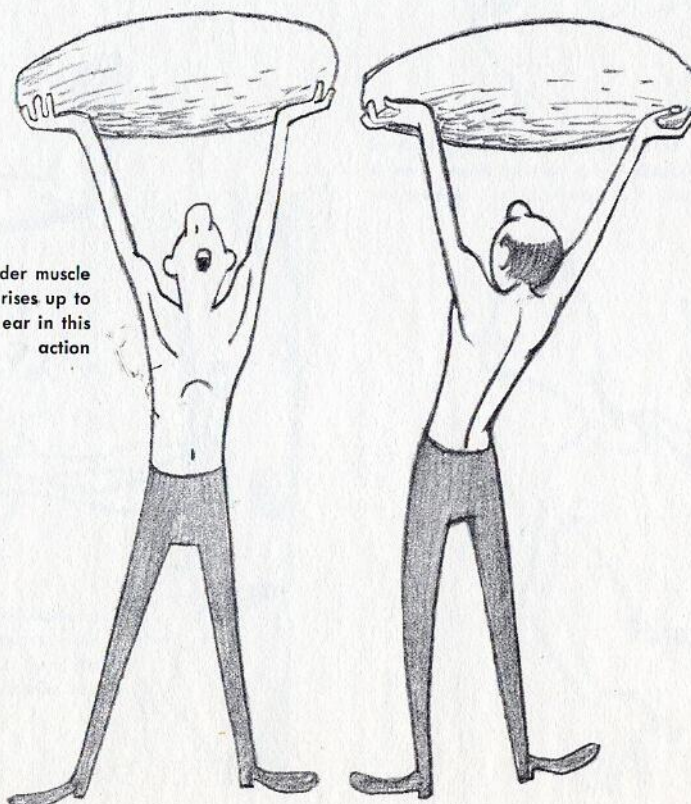
In the backward pulling action the reverse is true. The chest muscles are stretched and become flat. The shoulder

blades are forced inward to the spine and the covering muscles are compressed



The pronounced bulges of arm and shoulder muscles result from the thrust against a heavy weight, which compresses them. Upward thrust of arms causes shoulder muscles to rise, exerting a pull which stretches and raises the chest muscles

Shoulder muscle rises up to ear in this action



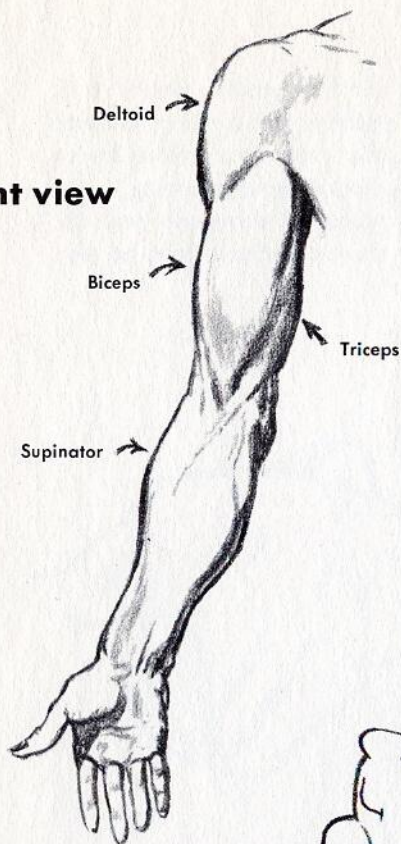
Note compression of shoulder and neck muscles in lifting heavy weight



If the arms are supporting a heavy weight, the back muscles will be compressed and bulky. However, if the arms are merely upraised, these muscles will be stretched and flat



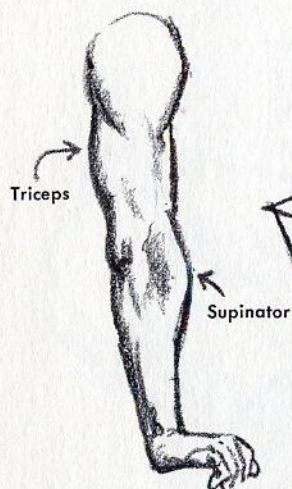
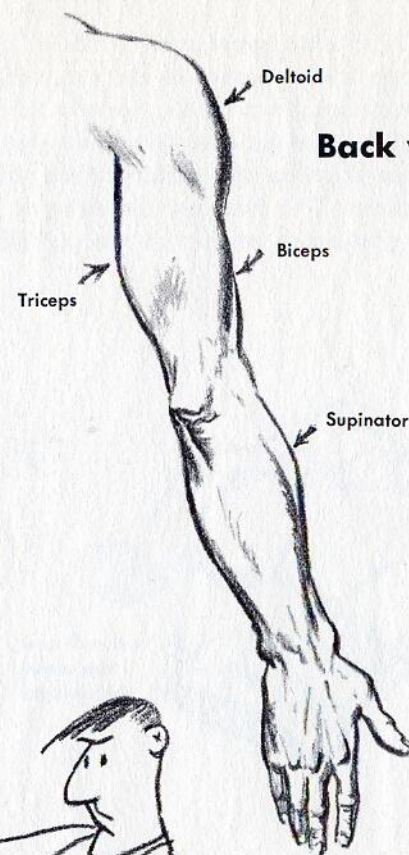
## Front view



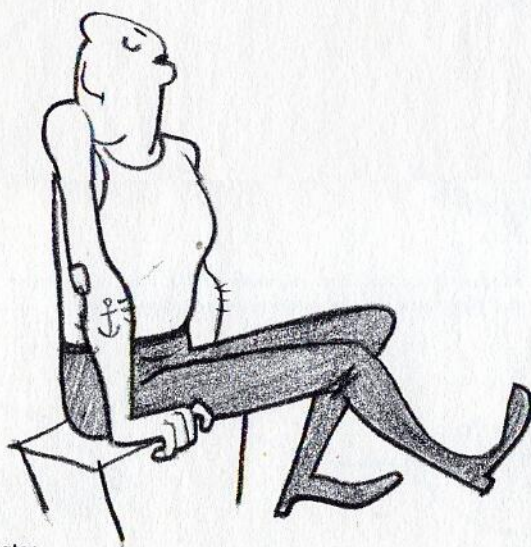
## The arm muscles in action

The Bill of Rights guarantees every citizen the right to bear arms — but arms aren't any good unless you can cartoon the muscles that move them. The principal and most easily seen muscles of the arm are the shoulder muscle (deltoid), the biceps and triceps and the supinator longus. The latter is merely a fancy name for a long muscle which begins above the elbow and extends to the wrist. The supinator twists the forearm, and becomes quite prominent as it does so. The biceps muscle bends the elbow and flexes the forearm. The triceps muscle, which runs the entire length of the upper arm, acts in opposition to the biceps and straightens out the arm.

## Back view



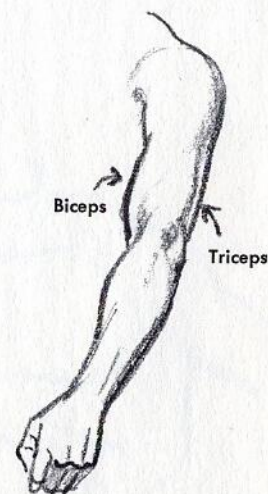
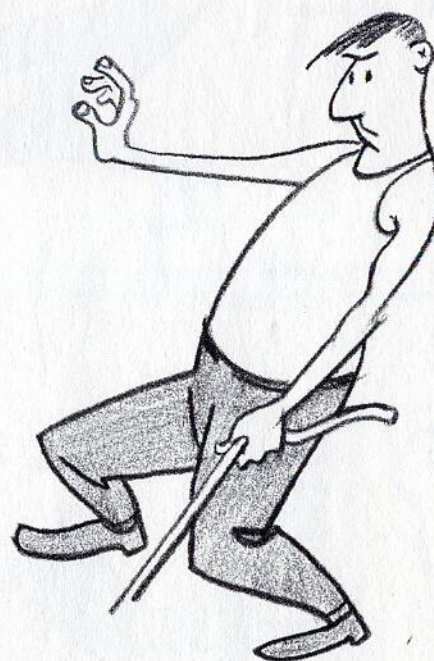
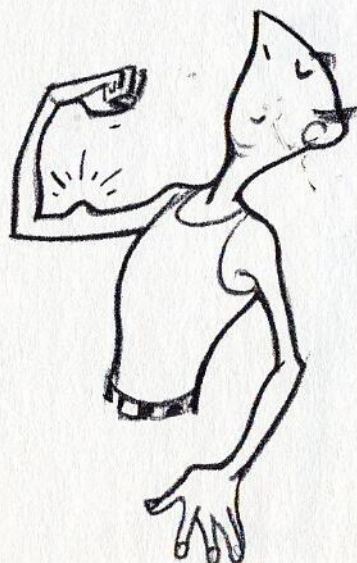
In a straight pushing, thrusting action the triceps and supinator become prominent. The biceps, in contrast, tends to flatten out



The action of the biceps may be represented fairly realistically in a cartoon figure — or it may be used for laughs to draw a skinny guy



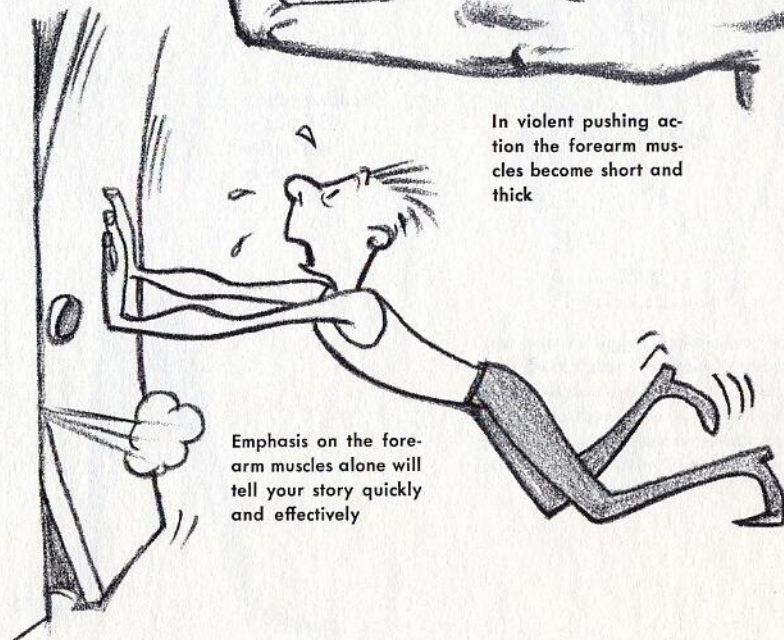
In bending the arm the biceps becomes short and thick



In strong pulling action, contraction of the biceps muscle makes it bulge. The triceps muscle becomes less prominent



In violent pushing action the forearm muscles become short and thick



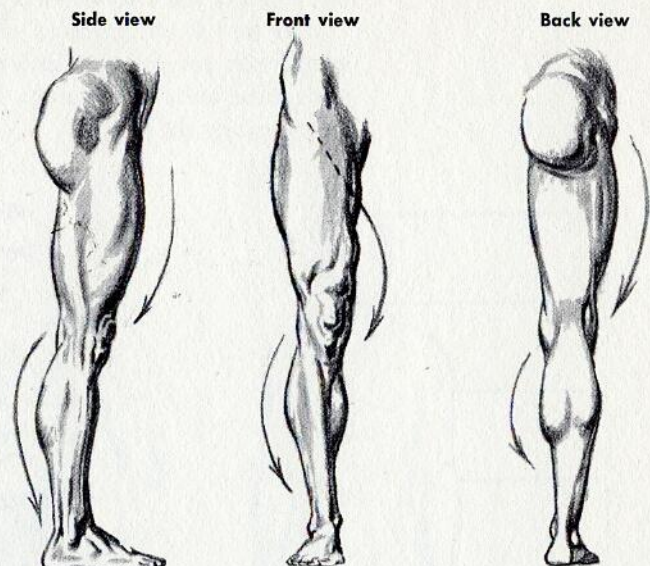
Emphasis on the forearm muscles alone will tell your story quickly and effectively



## The leg muscles in action

There are many lumps and bumps created by the muscles in a well-developed leg. Often the student becomes overawed and confused by their number and appearance and ends up by being so concerned with drawing them all that he loses sight of the over-all shape and action of the leg itself.

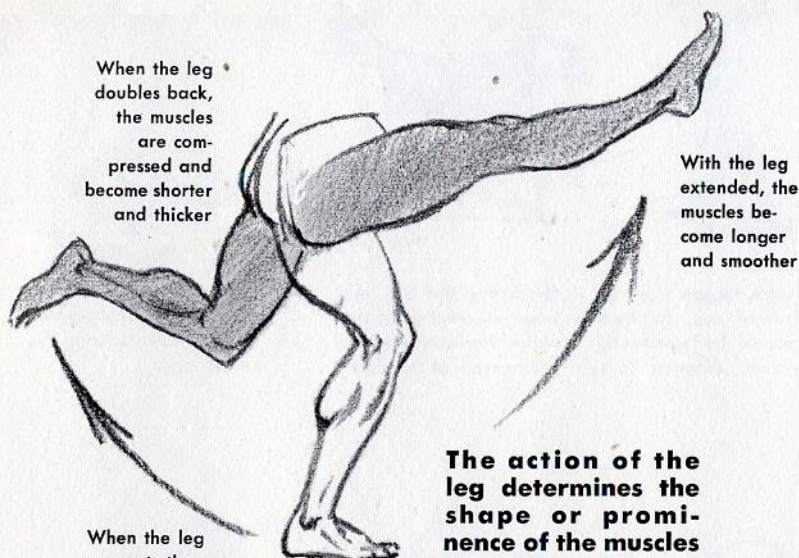
Two important muscles govern the shape and action of the leg. These are the sartorius and the gastrocnemius or calf muscle, which are explained at the right. These two muscles, in combination, create alternating curves which give pleasing form to the leg, and it is this over-all form which should be established first. Muscle detail, no matter how well drawn, should always be kept subordinate to over-all form.



Note the rhythmic relationship between the front of the thigh and the bulging calf muscle

The curve of the sartorius muscle (from the front of the thigh and the bulging calf muscle) is continued in reverse by the curve of the lower leg

Establish these smooth-flowing relationships between thigh and lower leg before drawing individual muscles in detail

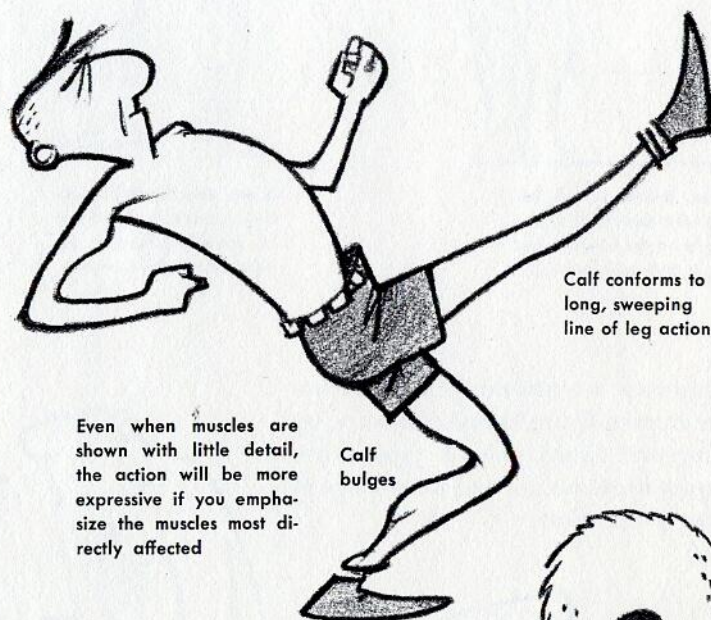


When the leg doubles back, the muscles are compressed and become shorter and thicker

With the leg extended, the muscles become longer and smoother

**The action of the leg determines the shape or prominence of the muscles**

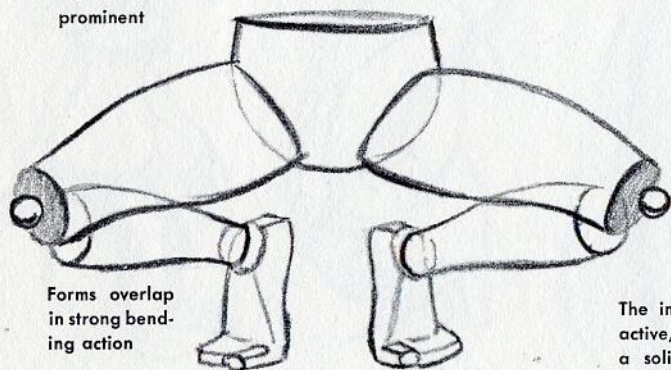
When the leg supports the weight, calf muscles are more prominent



Calf conforms to long, sweeping line of leg action

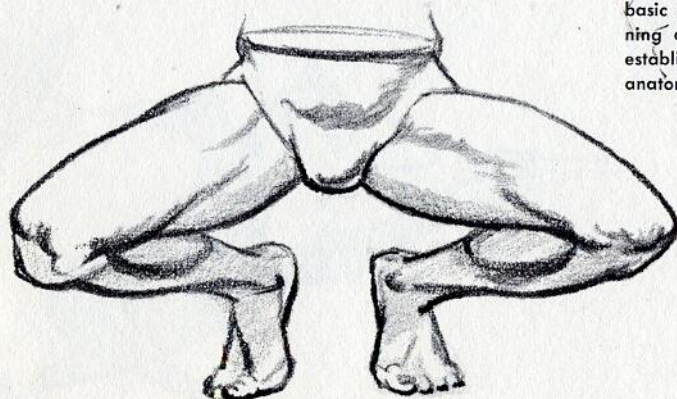
Even when muscles are shown with little detail, the action will be more expressive if you emphasize the muscles most directly affected

Calf bulges

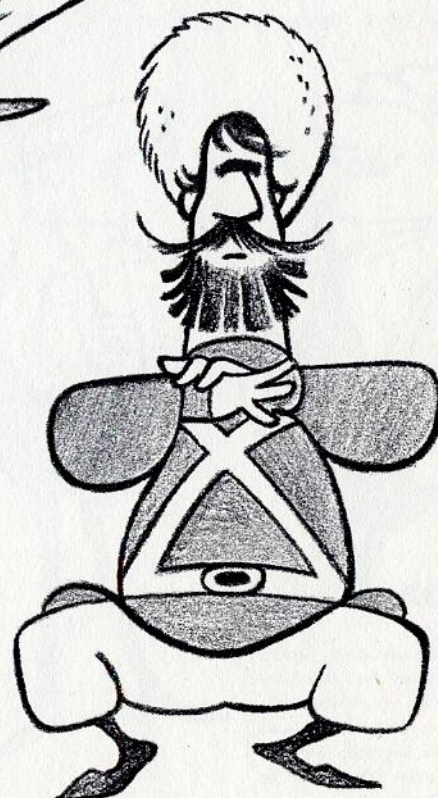


Forms overlap in strong bending action

The important thing in drawing an active, muscular figure is to establish a solid foundation first. "Drawing through" the simple forms of the basic figure is invaluable in planning action. With form and action established, you can add as much anatomical detail as you wish



Even a simply handled cartoon figure will be better if you have a good knowledge of what is happening to the forms beneath the clothing

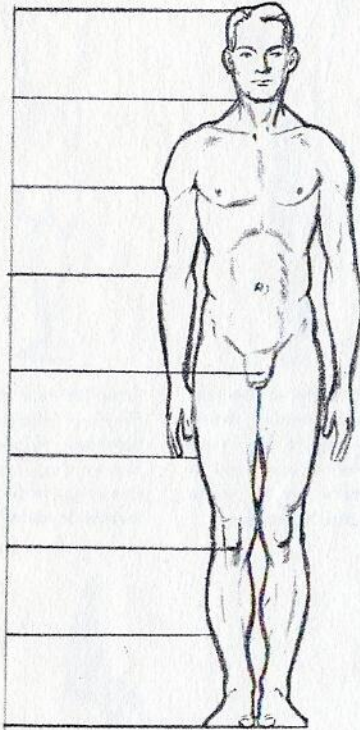




## The male figure

Ideally the male is a creature eight heads high — that is, his height is eight times the height of his head. His shoulders are broad in relation to the width of the hips, and his fingertips, when his arms are extended straight downward, reach to the middle of the thigh. He is so constructed that the crotch is located precisely halfway between the top of his head and the soles of his feet. His kneecaps, in turn, are halfway between his crotch and his fallen arches (he's got to have something out of order since nobody's perfect).

It is well to be familiar with these proportions of the ideal figure. However, even when you draw a handsome, strapping Greek God type, you'll take liberties with these ideal proportions. When picturing average guys, the sky's the limit in exaggerating them.



Here, drawn to the proportions described above, we have the ideal—handsome but seldom used



If we want to emphasize his masculinity we make his shoulders massive, his hips extremely narrow



The less rugged type of individual can be best expressed by narrowing shoulders, widening hips

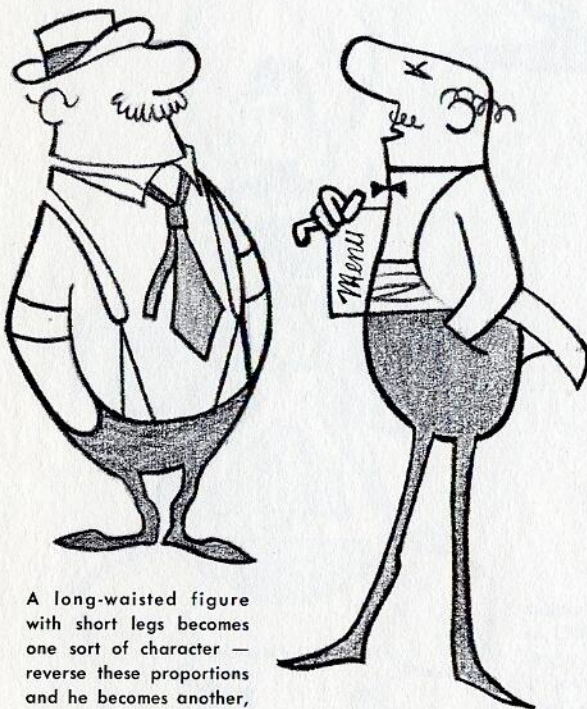


Shortening the legs and torso in relation to the size of the head produces one version of the figure

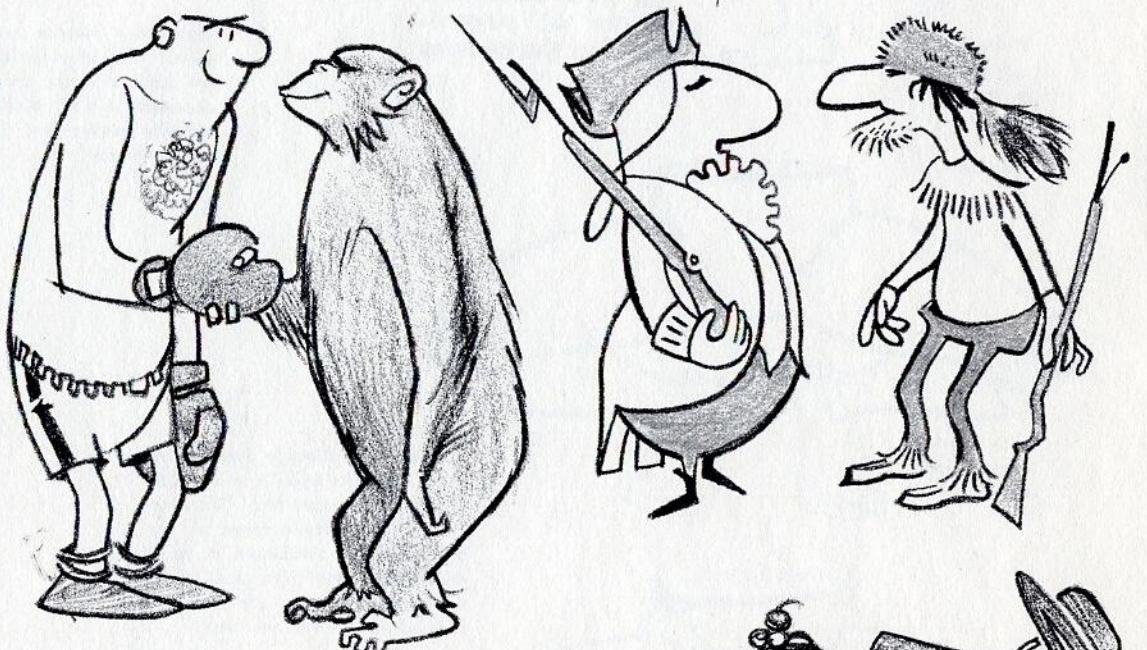


Lengthening legs and torso in relation to the size of the head creates another type

Vary in as many ways as possible the normal proportions of the human figure in order to come up with interesting and funny cartoon types — but base your exaggerations on a sound knowledge of the ideal figure proportions.



A long-waisted figure with short legs becomes one sort of character — reverse these proportions and he becomes another, commonly referred to as "Highpockets"



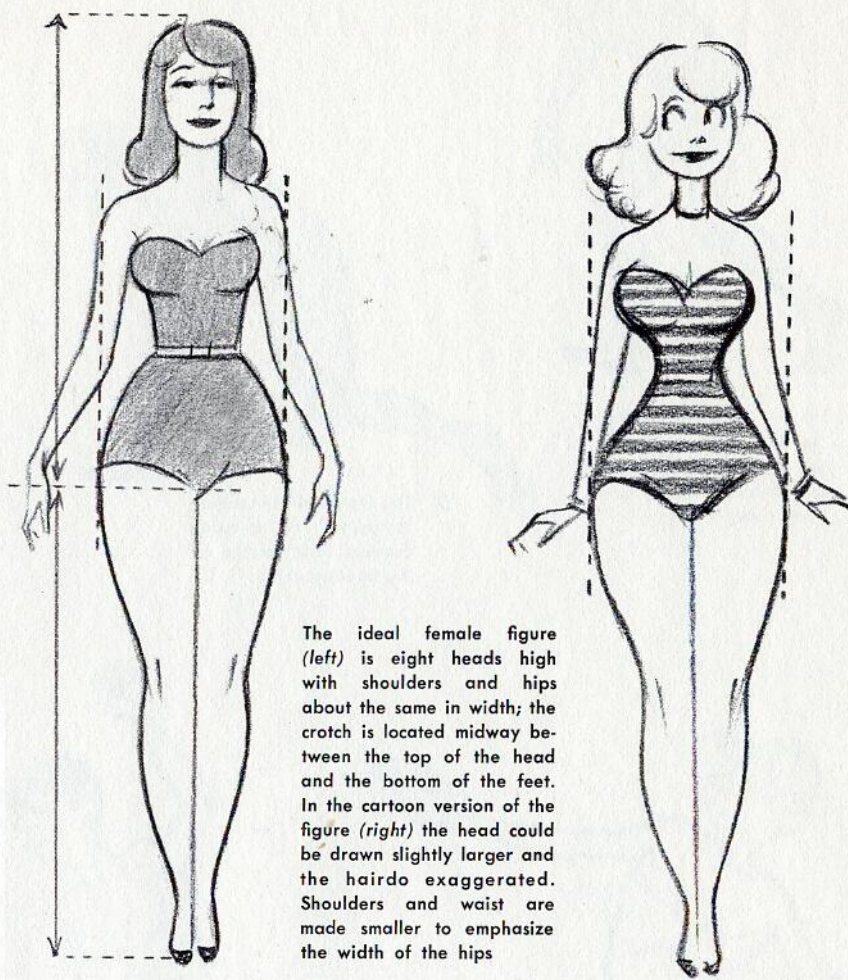
To suggest that a mug is first cousin to an ape, give him the anthropoid's characteristics — extremely long arms and short legs



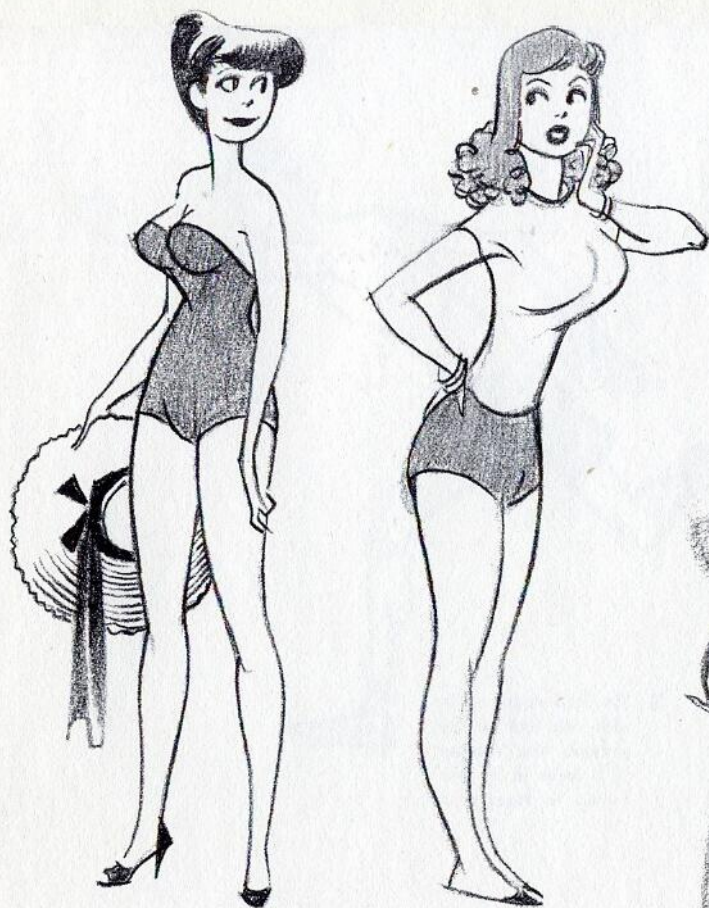


## The female figure

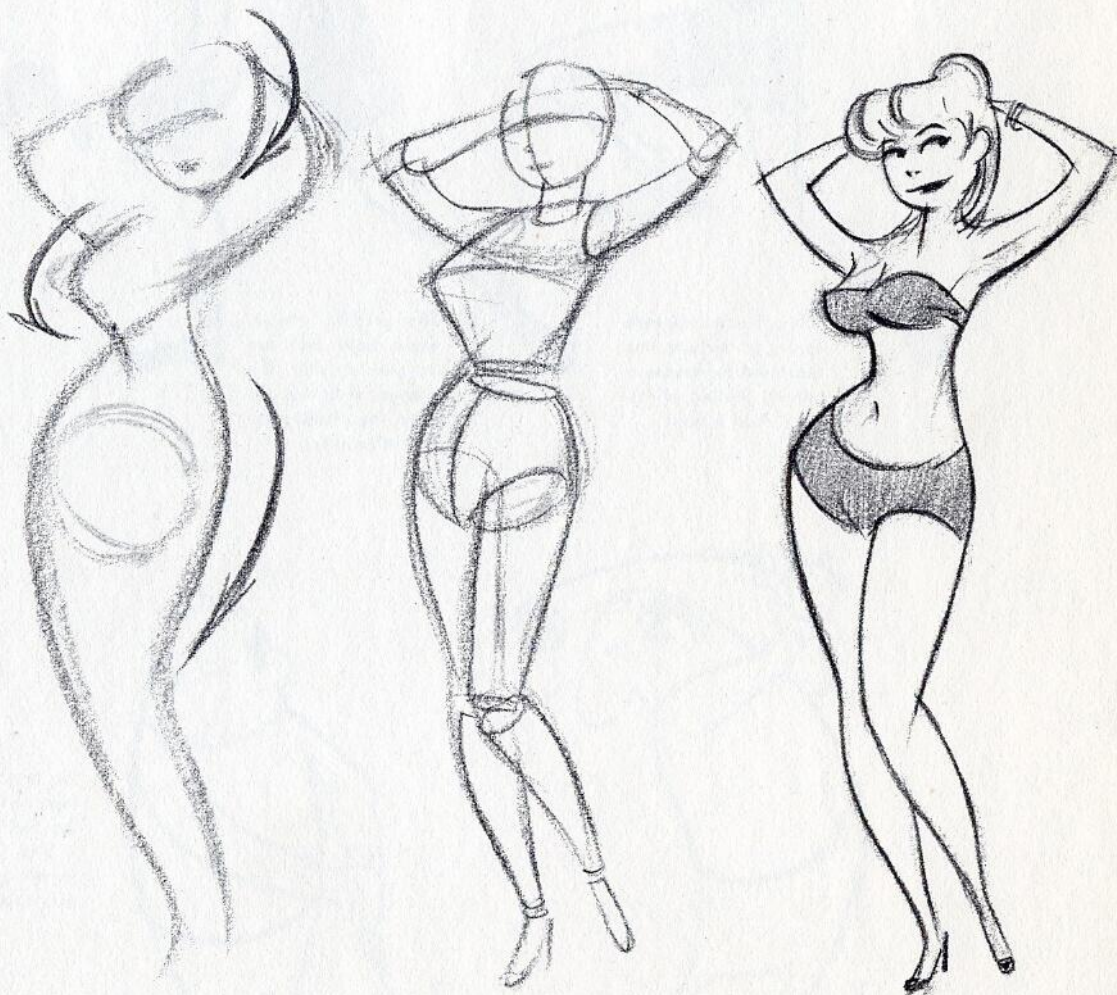
The proportions of the female figure differ from those of the male. A good understanding of these differences will help you exaggerate female characteristics for cartoon purposes and create cute, glamorous, sexy gals. Almost any liberties may be taken in distorting the male figure, but more restraint must be practiced when you cartoon females if they are to be attractive to the reader.



The ideal female figure (left) is eight heads high with shoulders and hips about the same in width; the crotch is located midway between the top of the head and the bottom of the feet. In the cartoon version of the figure (right) the head could be drawn slightly larger and the hairdo exaggerated. Shoulders and waist are made smaller to emphasize the width of the hips.



The crotch may be drawn higher than halfway to create a short-waisted, long-legged filly — or lower to show a long-waisted, low-slung chick



**1** In drawing the female figure, follow the procedure we showed you in Lesson 2, but emphasize her curvaceous character. Make one curve flow into the other smoothly

**2** Now you give solid form to the action sketch. Try to maintain the smooth-flowing relationship between the forms that you established in the preliminary drawing

**3** As you complete the figure and add hair, clothing, etc., don't let the lines of these details conflict with or destroy the smooth flow of action throughout the figure

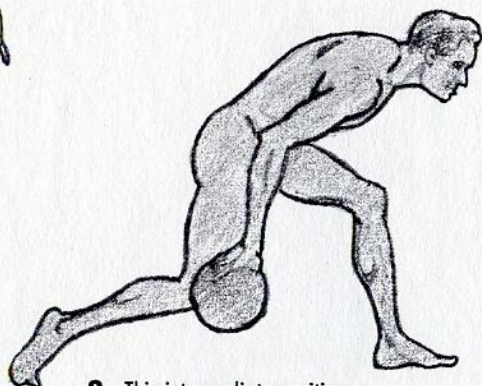


## Tips on drawing action

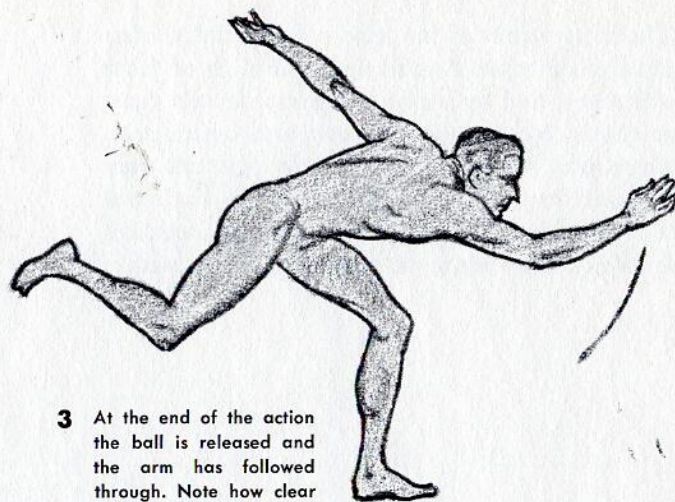
Whether you show all the muscles, merely suggest them, or ignore them completely, it is important to select a clear, descriptive view of the figure — a view that will explain the action at a glance. You will be most successful if you draw the figure in a position showing either the beginning or end of the action — such as at the start or finish of a stride or a swing. Positions in the middle of an action are usually not clear or quickly recognizable, or else they give the figure a posed look.



1 In this bowling action the arm has reached the top of its arc before starting downward on the forward swing



2 This intermediate position in the full arc of swing conveys little feeling of the bowling action



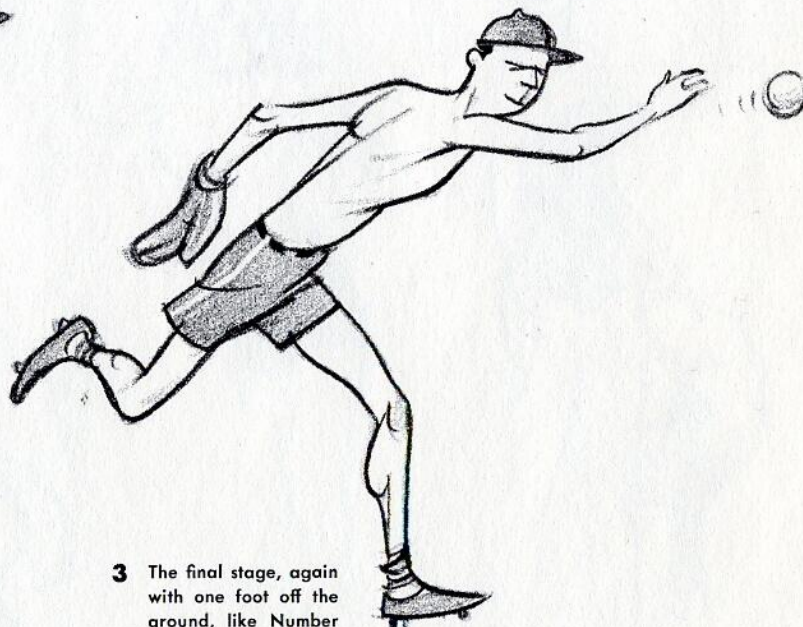
3 At the end of the action the ball is released and the arm has followed through. Note how clear the action is in 1 and 3



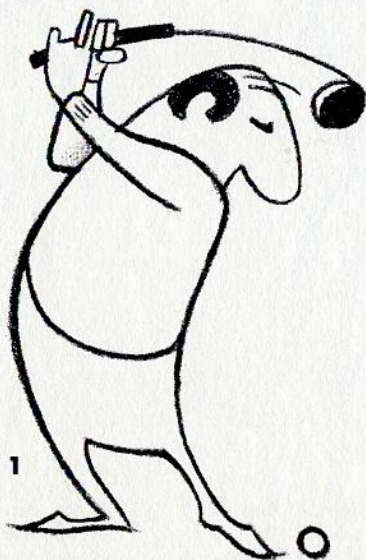
1 The extreme backward swing of the arm, the upraised leg create a strong feeling of action. Pose is clear



2 The middle stage, when both feet are in contact with the ground, does not express the pitching action effectively



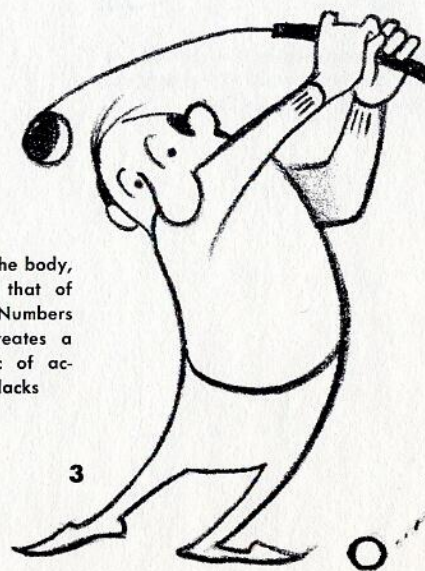
3 The final stage, again with one foot off the ground, like Number 1, is much to be preferred to Number 2



1



2



3

The bend of the body, repeated by that of the club in Numbers 1 and 3, creates a sweeping arc of action which 2 lacks





The backward bend tends to force together not only the forms of the figure at the back but also the fabric of the clothing, much like the pleats of the accordion. The figure forms and the clothing at the front of the figure are stretched taut, creating a sweeping, unbroken curve

In a forward bend the opposite is true. The sweeping curve is at the back of the figure, the compressed forms are at the front



## Clothing the figure

Regardless of how well you have constructed the figure and made use of the muscles in action, the end result can be spoiled if you do not clothe the figure properly.

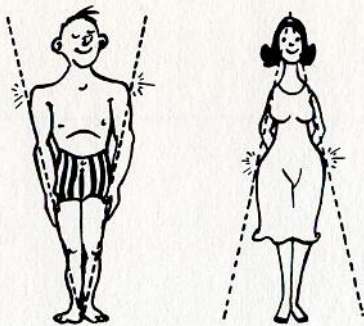
Remember, the figure changes with every action. As the various forms of the figure twist and turn, they become longer or shorter, or they create angles or curves. These movements are like those of an accordion being played. We might call one side of the figure the "active" side — here the forms are forced together and compressed like the pleats of the accordion. The opposite, "inflated" side has the longer, sweeping curves. When you draw the clothing you must keep in mind these "active" and "inflated" sides, together with any twisting movement of the torso. This will enable you to create fold and wrinkle patterns which reveal and emphasize the form and action of the figure in a natural, convincing way.



When the shoulders twist in opposition to the pelvis, this action is revealed and emphasized by folds such as those indicated by the arrow

Here the backward thrust of the arm and forward extension of the leg create tension in the clothing fabric, producing folds which underline these two actions

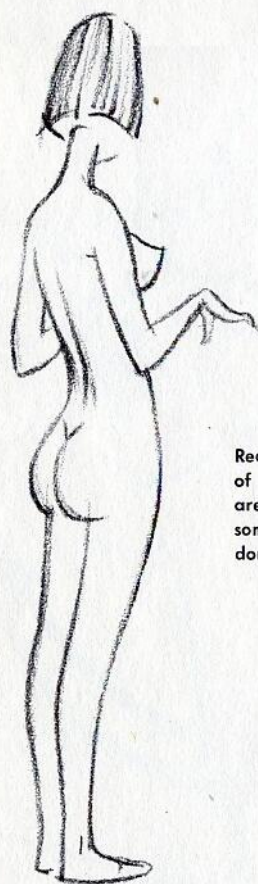




A man is widest at the shoulders — and the woman is generous where she sits

## Things to remember

In drawing gals and men — there is a difference. As the gallant Frenchman said: *"Vive la différence!"* Here are a few differences it is important to bear in mind. Generally speaking, long, flowing, soft lines are used in drawing women. Men are supposed to be more muscular — and the muscles make for bumps and angularities. Because drawing pretty girls is a special subject and brings up special problems, we devote the next lesson to it.



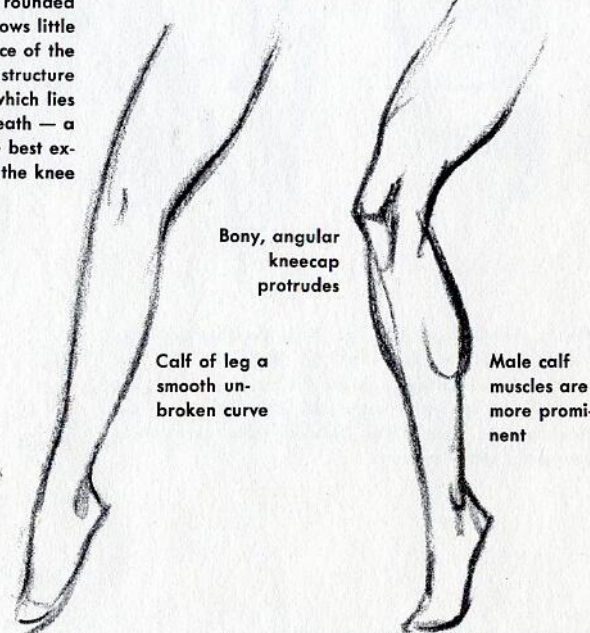
Readers take a dim view of ugly gals. Unless you are drawing a witch or some other evil character, don't make her repulsive



She's not pretty, but she's not unlikeable, either — she has an appealing quality



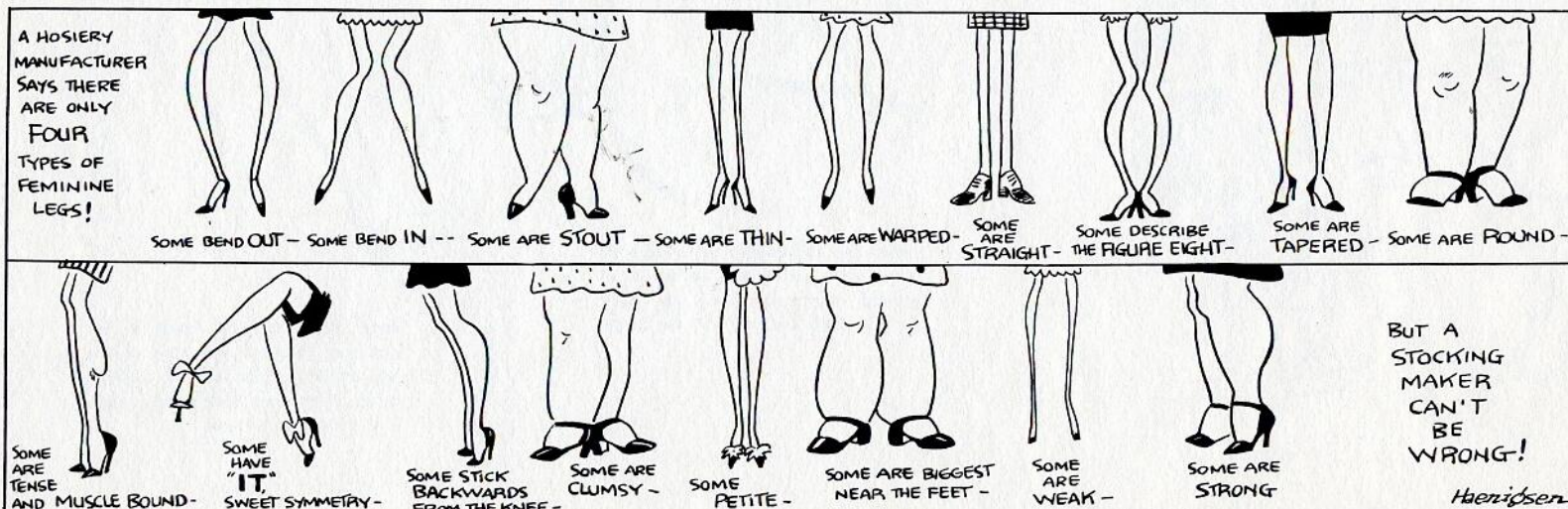
A plump, rounded leg shows little evidence of the bony structure which lies underneath — a dimple best expresses the knee



Bony, angular kneecap protrudes

Calf of leg a smooth unbroken curve

Male calf muscles are more prominent





FAMOUS ARTISTS CARTOON COURSE  
Student Work  
Lesson 6

To study and practice

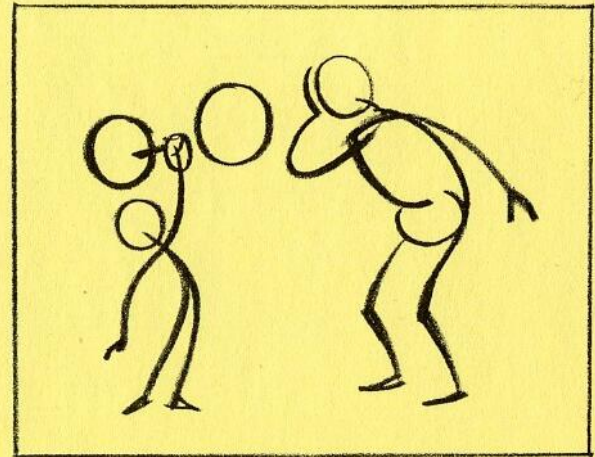
The framework of all figures is basically the same. The proportions of various parts may vary but the parts themselves should be established as simple cylinder forms before we concern ourselves with adding anatomical detail -- simple or complex. The basic form figure is something every cartoonist must practice drawing in many different positions and actions -- it is a successful, tested way to draw believable figures. Perhaps it seems a far cry from the humorous cartoonist's idea of a good, ridiculous figure. It is -- but good exaggeration always comes from understanding the reality of things.

Make many sketches of skinny, fat and husky gents using the basic figure to establish their form -- depending on your own style of drawing. However you work, don't become so involved with drawing the individual muscles that they become more important than the figure itself otherwise your drawings will resemble medical charts instead of being cartoons.

We will base our criticism of your drawing for this lesson on your understanding of muscle structure, figure construction and action together with your handling of any foreshortening problems which you encounter.

The assignment you are to mail to the School for criticism

On a sheet of 11 x 14-inch Bristol board, rule and ink a panel 7 inches high and 9 inches wide. In it draw and then ink with a pen or brush two men on a beach. One is a short, skinny character, 3/4 front view, who is nonchalantly lifting a huge barbell with the greatest of ease. The other is a big, muscular gent of the athletic type, front or 3/4 front view, who is staring at the little guy in amazement. The big fellow will provide an opportunity to show muscle detail but be sure to establish good action and facial expression first. You may follow the gesture-action sketch at the right for general action and composition if you wish or, better still, create your own.



Present your assignment in the same clean, professional manner you would use if you were submitting it to the cartoon buyer of a publication. Letter your name, address and student number carefully in the lower left-hand corner of the page. In the lower right corner, place the Lesson Number. Mail to:

FAMOUS ARTISTS CARTOON COURSE  
Westport, Connecticut



**Famous Artists Cartoon Course**

**Westport, Connecticut**

**Pretty girls**

Lesson



Rube Goldberg

Milton Caniff

Al Capp

Harry Haenigsen

Willard Mullin

Gurney Williams

Dick Cavalli

Whitney Darrow, Jr.

Virgil Partch

Barney Tobey





Joe King



## Pretty girls

by Joe King, outstanding advertising cartoonist



Although cartooning and illustration are miles apart in most of the elements that go to make up a picture, there is one meeting point at which they join hands in the good old fraternity grip — the pretty girl.

The pretty girl, the dame, the frail, the tomato, the cookie, the cutie is always welcome in a cartoon no matter how grotesque the rest of the characters may be. She comes down to us right through the ages from the first lady of the world — Mother Eve. Cleopatra, the Queen of Sheba, Salome, Madame Du Barry, Josephine, Sadie Thompson — all of them stand out in the pages of literature like a headlight in a tunnel. The pretty girl is here to stay, and the cartoonist must include her in his repertoire. As Oscar Hammerstein sang in his great musical piece, "South Pacific:" "There is nothing like a dame,

Nothing in the world — "

In drawing a pretty girl, whether a society dame, farmerette, waif or shop girl, don't be too skimpy with the bust or the thigh line. These can be accentuated without giving the drawing any suggestion of vulgarity. The beauteous charms must all be there without pointing them up in the text or balloons. The girl may be very proper, but the appeal of her graceful curves is never unwelcome. Al Capp's hillbilly types and Milton Caniff's Oriental vampires are entirely different characters, but both have plenty of sex appeal and give the reader very satisfactory eye exercise as he follows the story.

The sexy female figure may be divided into four central parts. First comes the head and hair. A pretty face must be crowned with appropriate hair. Above all the hair style must fit the times. An 1890 hair style on a modern bathing beauty would never get past the reader. Women readers especially are critical of the way a cartoonist draws the hair on any female characters. Second come the breasts. It is here that beginners and sometimes even professionals go off the beam by over-exaggeration. The width of a single pen or brush line can make the difference between a pleasing shape and a vulgar or crude lump of fat. Don't lay sex on with a trowel. Be subtle about it. True, the breasts are drawn

larger and a little higher than in real life, but how much larger and higher depends upon the over-all style of the individual cartoonist. Third are the hips. Exaggeration is needed here, too, but again one must not overdo it. Fourth and finally come the legs. The sexy gal must have *long* shapely legs. A short, dumpy figure has not much appeal and should be avoided.

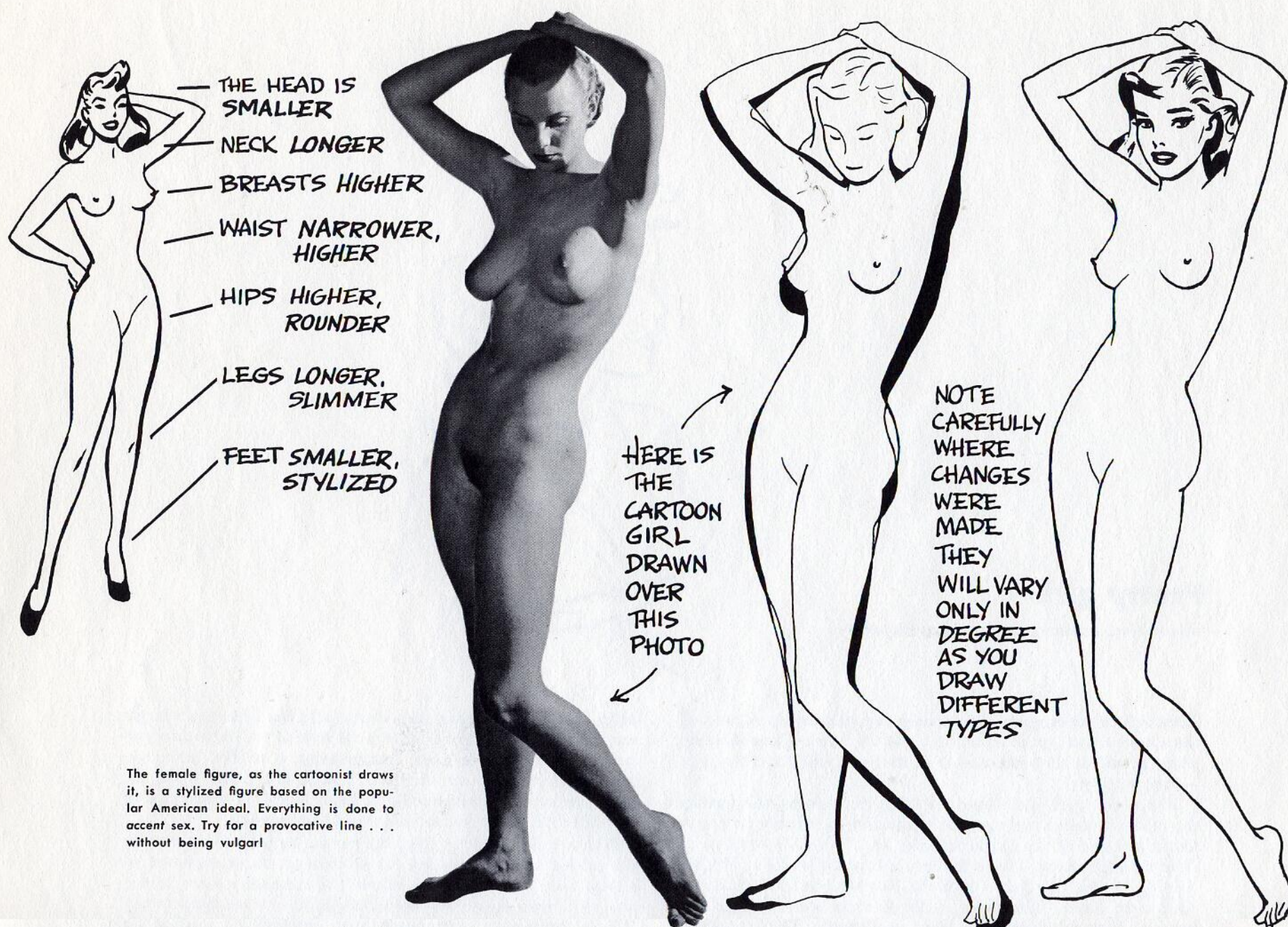
When drawing pretty girls, the particular job will determine the amount of exaggeration. A sexy babe on the menu cover for a local men's club banquet allows the cartoonist more leeway than the female figure for a comic magazine or a newspaper strip.

Most professional cartoonists have developed a method for drawing pretty girls, and the beginner should work with that in mind. When you are practicing and find that you have drawn a girl's figure that appeals to you, analyze why it is appealing. Redraw it several times until the pose and figure construction are firmly established in your mind. Above all, try to establish how you drew it and try redrawing it again and again using the same method. One well known cartoonist who always said he couldn't draw sexy or pretty girls became one of the top girl artists in the business simply by drawing one complete figure from pencil to ink each day for one year. He stuck to his schedule and at the end of the year's time he had so systematized his method of procedure that pretty girls were easier for him to draw than fence posts or rocks.

When drawing a pretty girl, don't pencil and ink a pretty face and then hook a body to it. Draw the whole figure in pencil and be sure it is what you want before you ink it. Master the female figure as a whole. The prettiest and best drawn female face in the world wouldn't be worth a can of beans if the artist hooked it to an ill-proportioned body.

Your ability to draw pretty girls will have a lot to do with your success in the cartoon business. We repeat — you learn to draw by drawing, and that is particularly true with pretty girls. Devote a good proportion of your working and practice day to drawing pretty girls. Always keep your eye peeled for beauty — most men do!





The female figure, as the cartoonist draws it, is a stylized figure based on the popular American ideal. Everything is done to accent sex. Try for a provocative line . . . without being vulgar!

### The cartoon girl based on life

As you see here, the cartoon girl, although she is *based* on real life, has changed. The best description of this process is *idealization*. Over the years of drawing for reproduction, successful cartoonists have found that slight variations from real life have paid off in reader-interest. There has emerged an "ideal" figure that the readers seem to like.

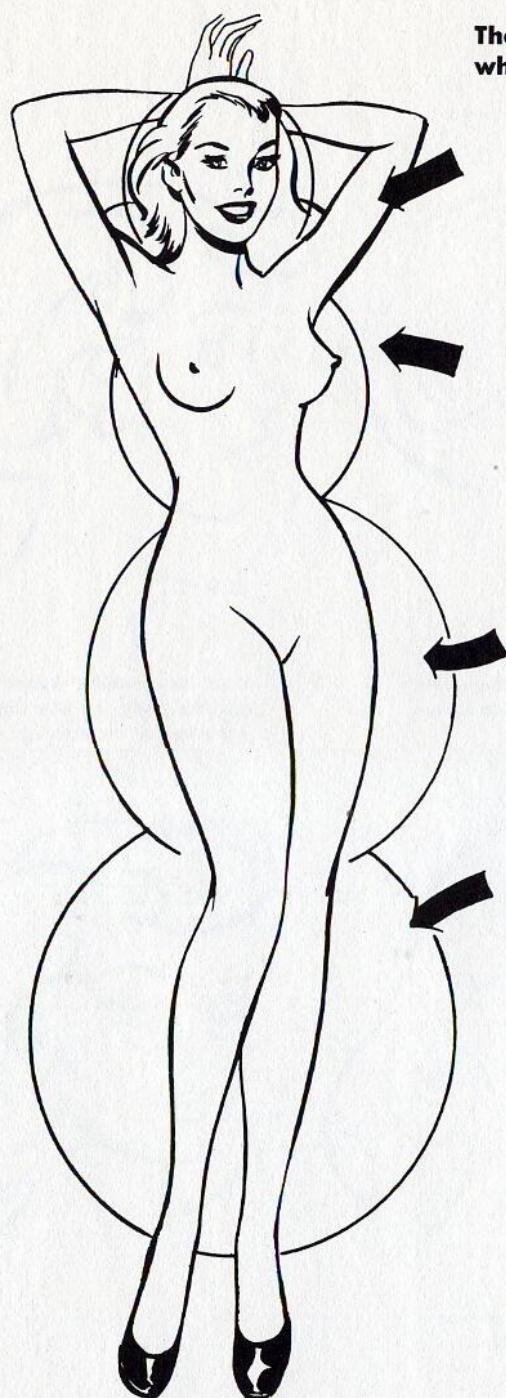
This is like the fashion business — there are tricks to glamorizing the female figure. Fashions, however, are just the ever-changing frosting on the cake. Except for hairdos, the ideal American girl's figure doesn't change too much from year to year. Your job right now is to learn to construct this ideal figure.

As you draw and practice, you will find that you are adding or subtracting details to suit your own style and taste. We strongly advise you not to branch off and experiment with drawing pretty girls until you honestly feel that you understand the four parts of the girl's figure — and can draw them from any

angle. In no other subject does a slight variation of an eyebrow or lip line change the picture so much. Don't worry about getting individuality into your girls — unless you are a mechanical copier you can't help developing your own types. As we said before, don't concentrate on just one part of the pretty girl's form. A carefully drawn head will be sunk if you attach it to a carelessly constructed body and vice versa. The parts have to fit together into an appealing, feminine figure.

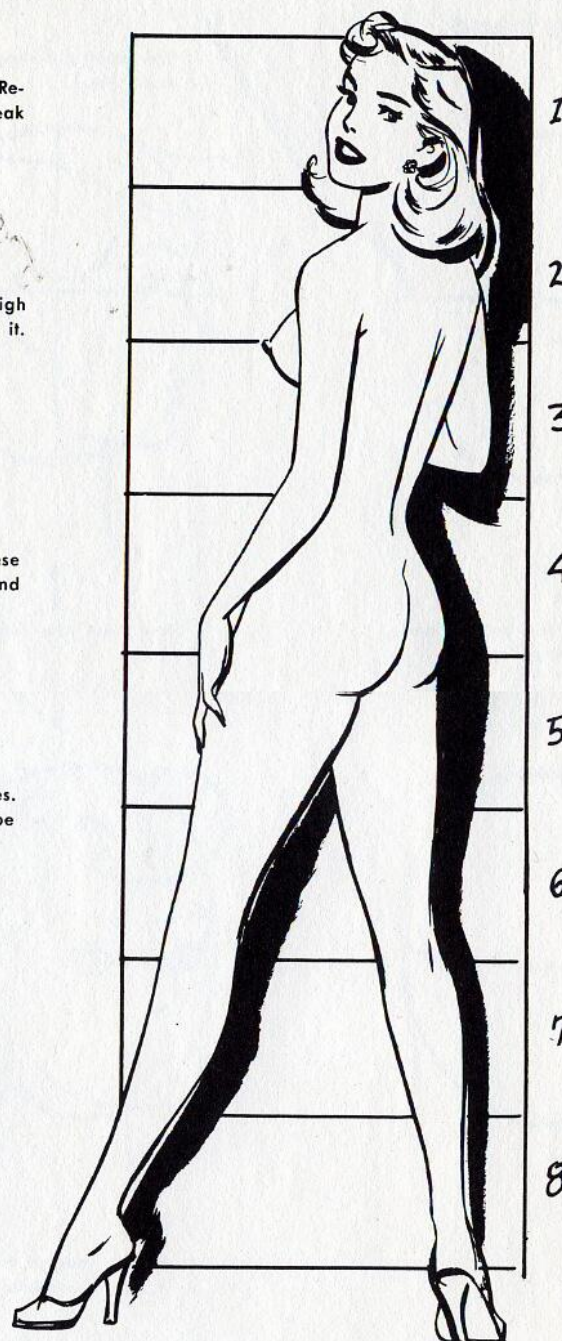
Every successful cartoonist *must* be able to draw a pretty girl. Even in the wildest comic gags, the girl is an essential foil for the goofs. When you get into an advertising job, the client is going to demand them. Like everything else in cartooning, the only way to learn to draw your type of pretty girls is to apply the seat of your pants to your chair and *draw* them. Those flowing lines don't come from anything but practice.





**There are four essential parts to a sexy girl which make her what she is**

- 1** A pretty or cute face, plus hair. Remember — hair can make or break a girl drawing
- 2** The breasts. They are drawn high and full shaped. Don't over-do it. Size isn't the important thing
- 3** The hips . . . when well drawn, these lines give your figure movement and action unmistakably FEMININE
- 4** The legs are long with slim ankles. Legs, ankles and feet should be drawn well but SIMPLY



### Pencil in the figure

Fortunately for our peace of mind, pretty girls are very seldom seen running around without their clothes. However, to draw them in their civilized state, a cartoonist must have a thorough knowledge of their construction.

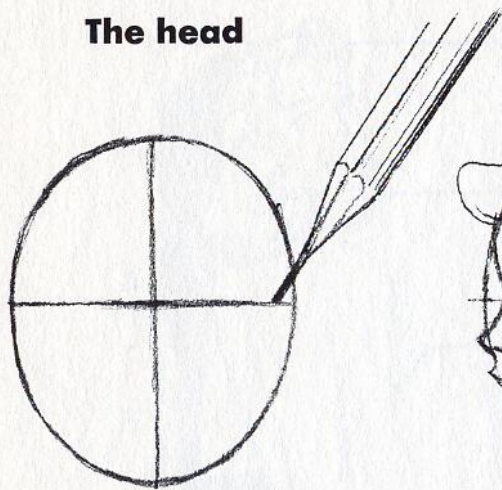
The most successful method for drawing appealing babes is to pencil in the complete figure in the desired pose before attempting to clothe it. The clothes take their shape and move according to the frame they are hung upon. That frame has to be *right*. Study the proportions of these figures and practice until you learn to draw girls easily in natural poses. Clothes won't hide a poor drawing of the figure underneath them.



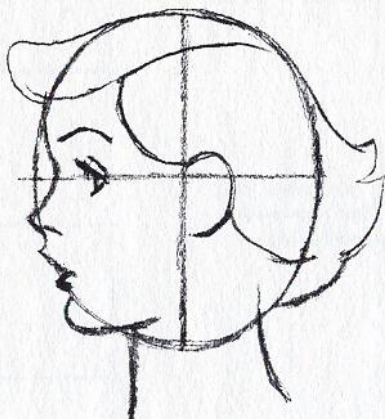
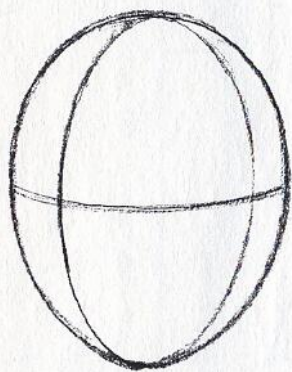


## The head

The pretty girl head is drawn by the same system you used to draw the comic head . . .



First draw the balloon and place the bisecting lines



Now draw the features in . . . so



Remove the guide lines and add hair for a finished pencil drawing



Then ink carefully. Remember, the width of one line will throw off the drawing . . .



If you imagine the balloon as an egg with these three lines drawn on it, you can rotate this shape and draw the head in any position . . .

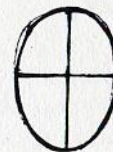


By tilting the egg with the bisecting lines, you should be able to draw heads with variety of interest and action . . .

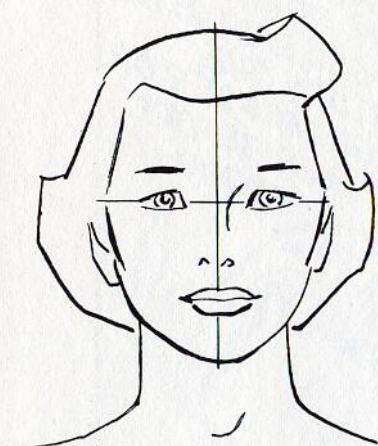


## Three types

The pretty girl in comics, on television or in Hollywood does not permit much variation . . . Learn to draw these three basic heads and you can create recognizable types for any cartoon situation . . . Hairdos and accessories will complete the character . . .

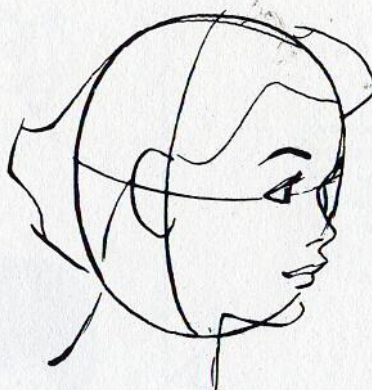
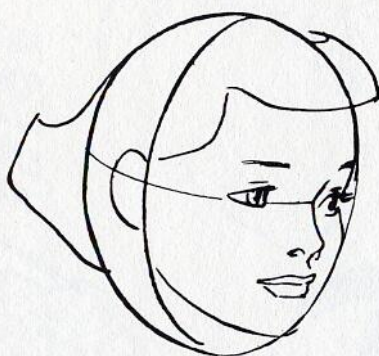


The same simple egg shape is used to draw three basic types of pretty girls . . .



## 1 Average

Eyebrows are short, straight . . . the eye is a simple triangle . . . mouth wide . . . shoulders square



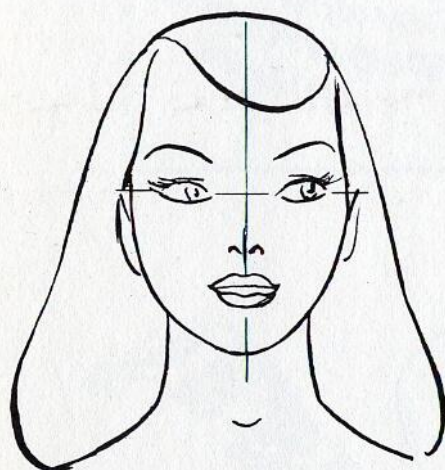
Keep these forms angular, crisp



ATHLETE

ALL-AMERICAN  
TEEN-AGERCAPABLE  
SECRETARY

HOUSEWIFE,



## 2 Long Oval

Eyebrows are long, arched . . . eyes are ovals . . . mouth is full, not so wide . . . make the face a long oval . . . slope shoulders



Keep her lines long, flowing

HIGH STYLE  
BABES

ADVENTURESS



LITERARY

EXOTIC  
TYPES

## 3 Round

Close hair on forehead . . . eye is more circular . . . tiny nose . . . mouth is smaller . . . round chin . . . shoulders rounded



Keep her going in circles!

SHOW  
GIRLBIRD  
BRAINGOLD  
DIGGER

DOWAGER



## The pretty girl hairdo

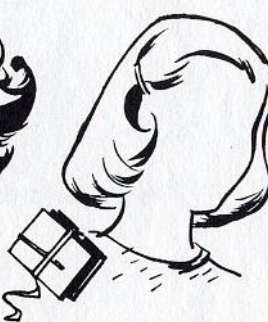
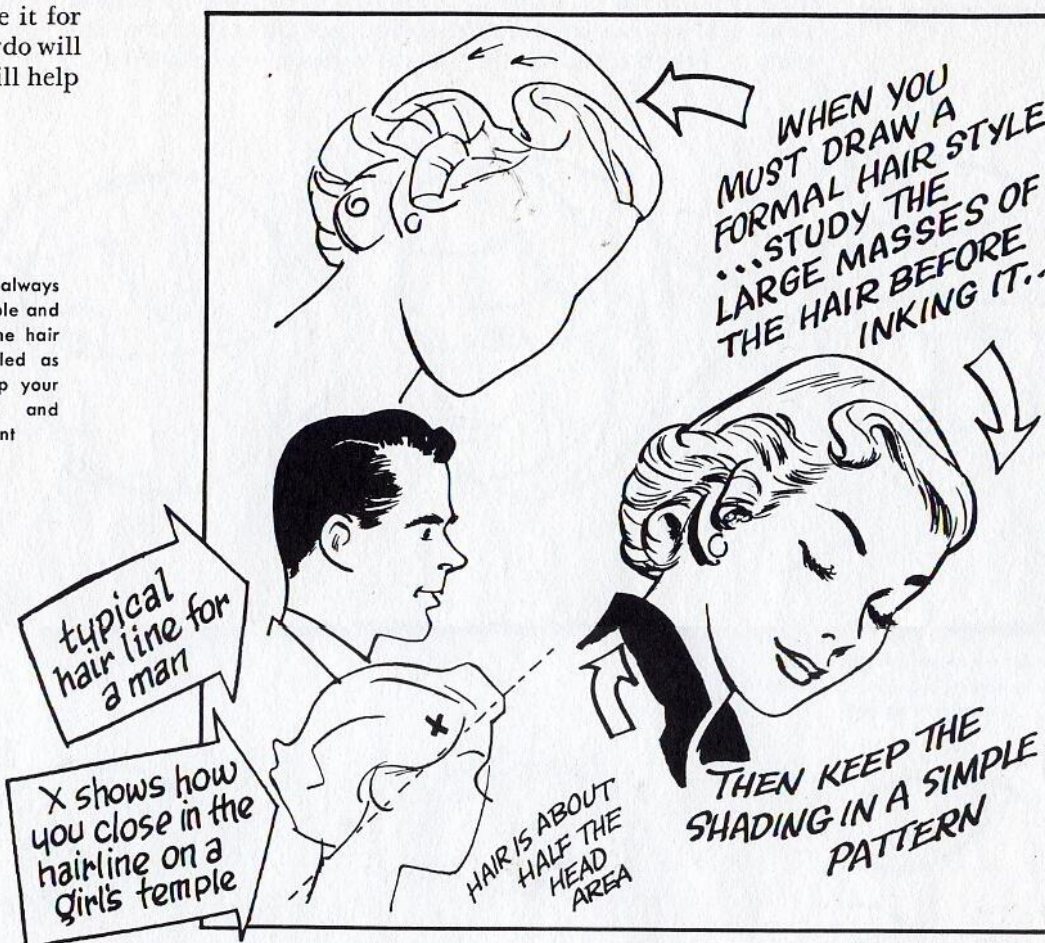
Hair is your one *decorative* element — use it for color, for strong design effect. Type of hairdo will define character — and how you draw it will help tell your story or express a mood.



While you must always keep the face simple and without shading, the hair may be as detailed as you like. But keep your lighting, textures and technique consistent

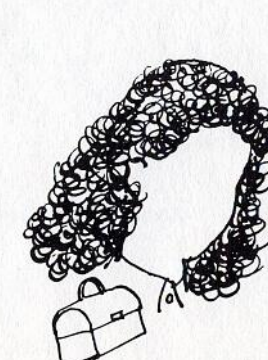


A general rule is to give the sexy girl long hair... but your smart cartoon girls should wear the latest styles



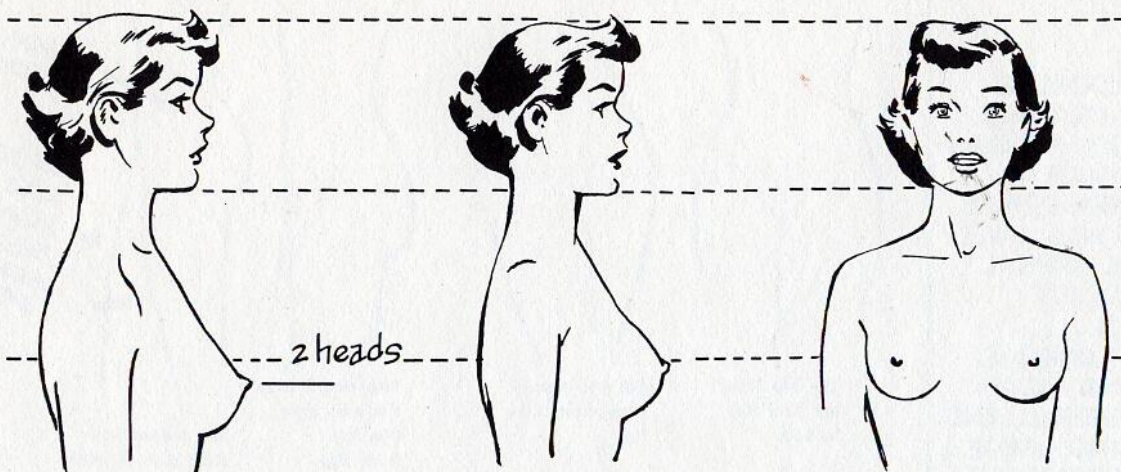
## Hair! Hair! Hair!

It helps tell *who* your characters are ... *what* they are doing. Here we throw the faces away and let the hairdo speak for itself in defining character.





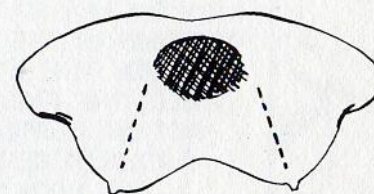
## The breasts and torso



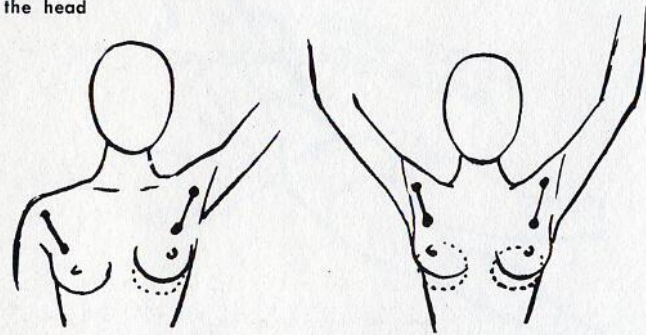
Here's the true proportion of the breast to the figure. The nipples are a little more than two heads below the top of the head

For cartoon girls, raise the nipples up to two heads

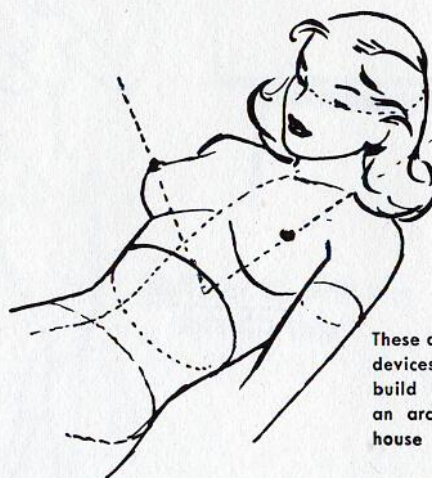
From a front view, the breasts are seen to lie on side planes of the chest



And point slightly away from each other

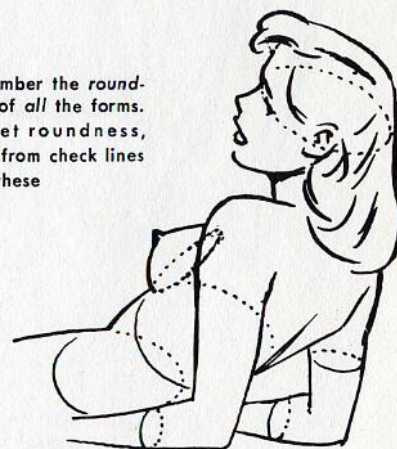


Think of the breasts as being attached to the shoulder cap, as above. Raising the arms lifts the breasts up and to the side



These are construction devices. You must build the forms as an architect plans a house

Remember the roundness of all the forms. To get roundness, work from check lines like these



Be selective in the choice of drapery, folds and wrinkles to enhance the breast form



Use pattern carefully to show shape of the forms



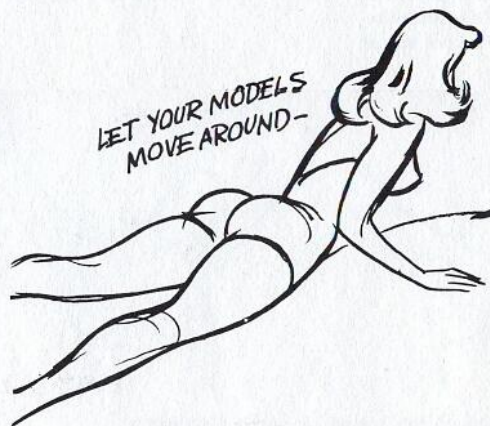
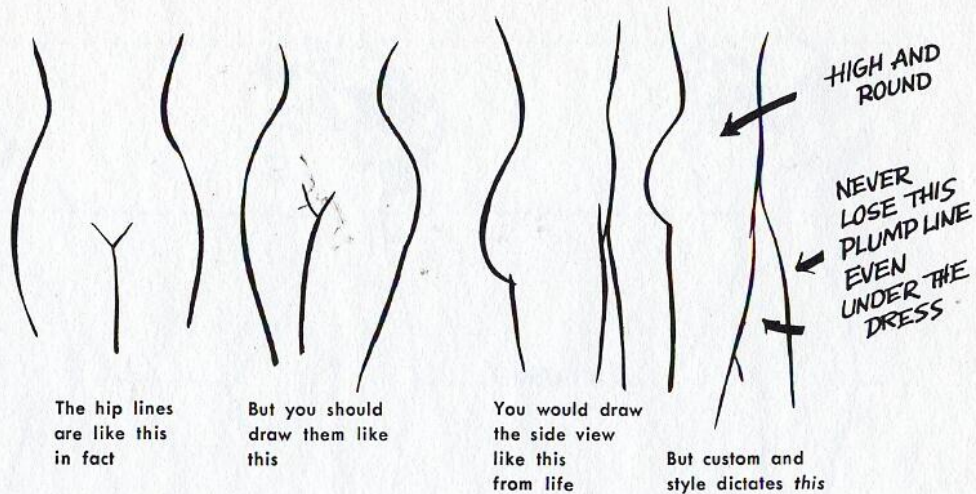
If your girl is wearing middle tones, use juicy blacks to define form





### Hip, hip . . .

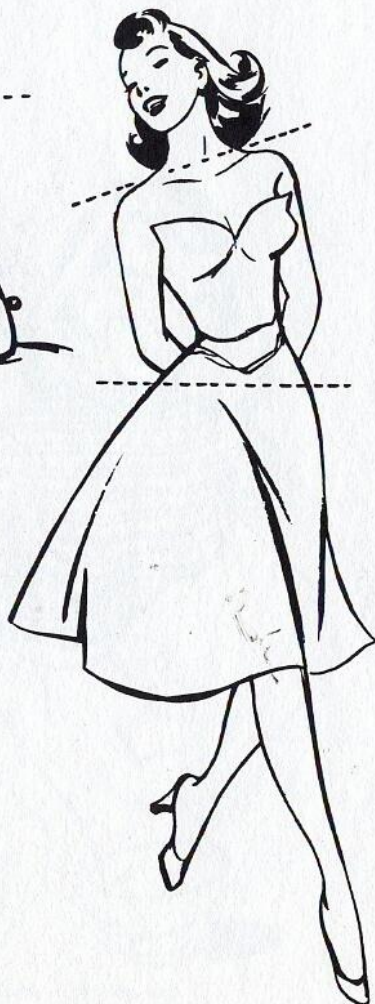
CLOTHES CAN SELDOM BE USED TO COVER BAD DRAWING. AND THE KEY TO A GOOD FIGURE DRAWING IS THE HIP AREA . . . WHEN THE HIPS ARE DRAWN WELL, THE FIGURE WILL HAVE ACTION, FEMININE APPEAL AND CLOTHES WILL FIT AND LOOK WELL . . . KEEP THE WAIST LONG AND NARROW . . . THIS WILL ALLOW THE BUTTOCKS TO BE FULL AND ROUND WITHOUT BEING LARGE. NOTE HOW THE EXAMPLES OF THIS RULE GIVE THE THIGH LINE A LONGER AND MORE GRACEFUL SWEEP . . .



IT'S THE OBSERVING THAT COUNTS



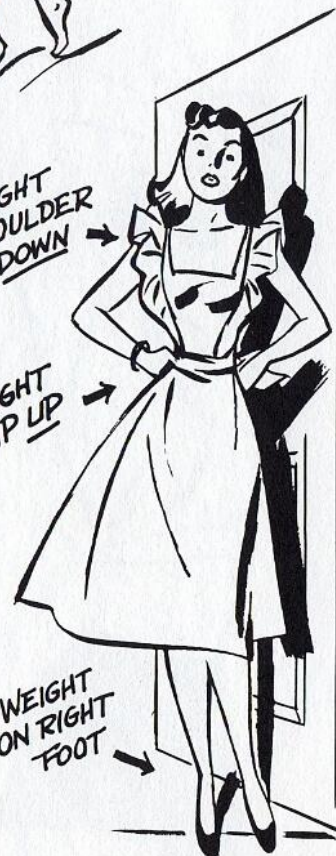
Opposition of forms . . . this means that the shoulders will slant opposite to the hip line when the figure is in balance



RIGHT SHOULDER DOWN

RIGHT HIP UP

WEIGHT ON RIGHT FOOT



If the weight is on the right foot, the right hip will be higher and the dress or apron will flare out on that side



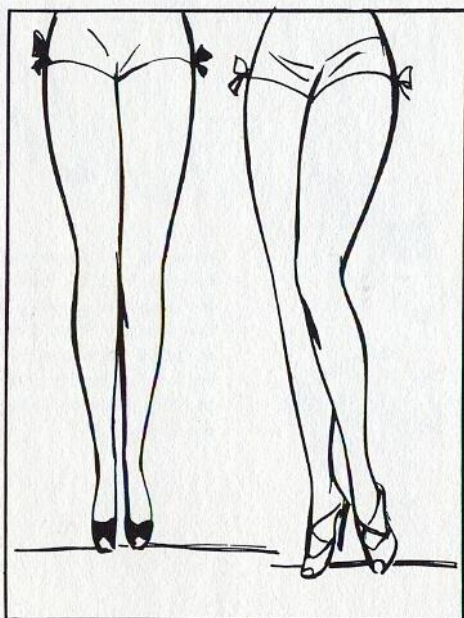
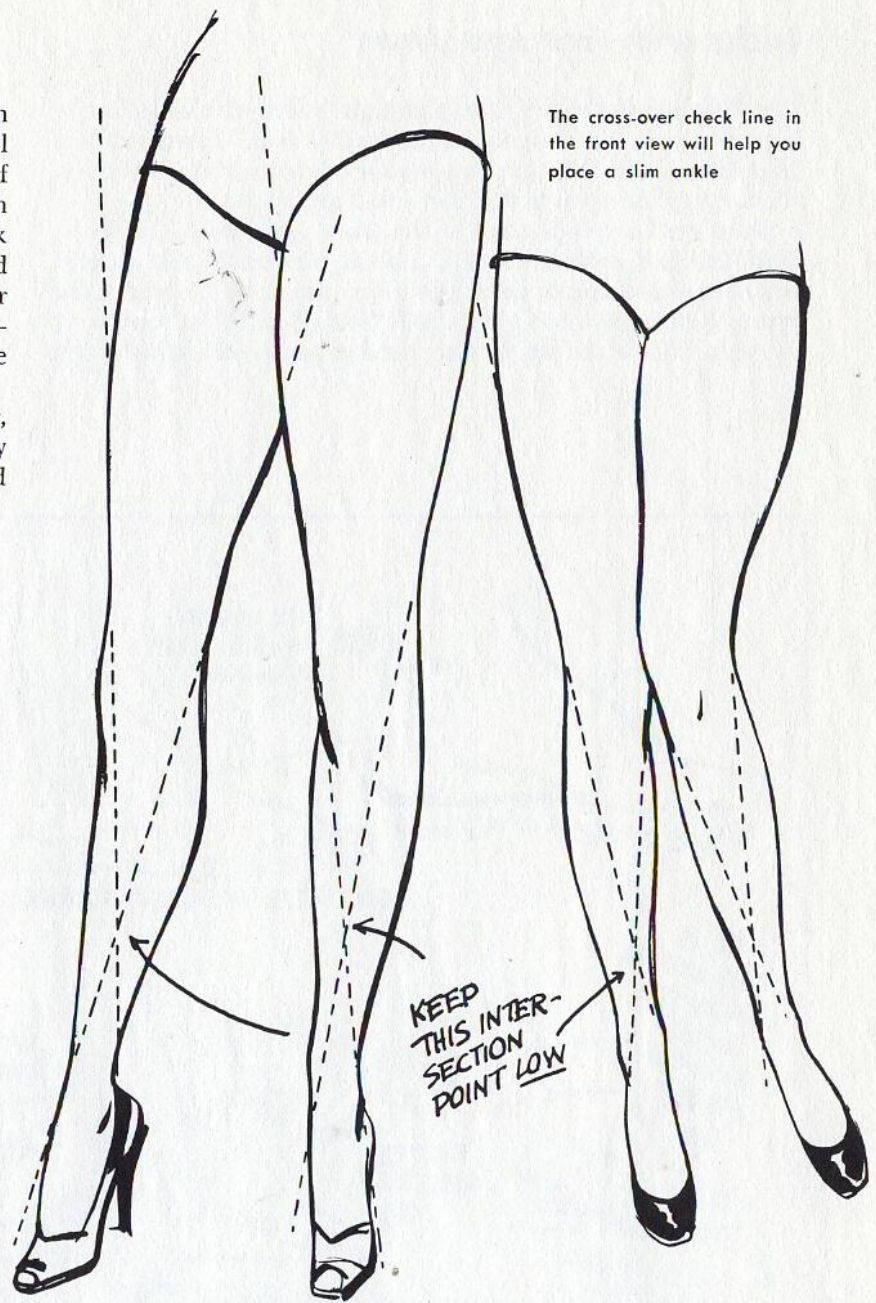
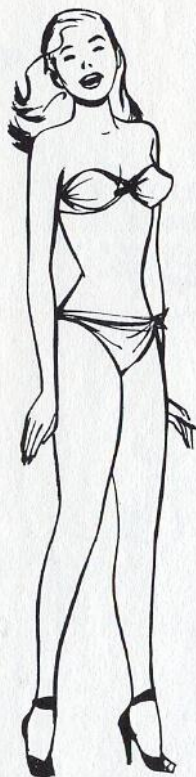
The man on the street will never know how much lies behind your simple girl drawing



## Legs

Here we have illustrated a good system for placing the ankles on extended legs. A line extending from the rear of the thigh will give you the front instep line. A crossing line from the front of the thigh gives you the other side of the ankle. With the legs in a bent position, you'll have to pencil in a false thigh to check from, but the effort is worthwhile. Just remember that this and other formulas can be helpful, but formulas are no substitute for accurate observation. Observing a pretty girl's legs is no chore — this is one spot where you can combine business with pleasure and come out with a profit.

As you practice drawing the pretty girl's legs, work for long, smooth, flowing lines. The leg lines *must* sweep down cleanly and surely. This is no place to experiment with cross-hatched kneecaps.



Throw the weight on one leg for greater interest



To suggest strong lighting, use a thick and thin line . . . (don't use shading)

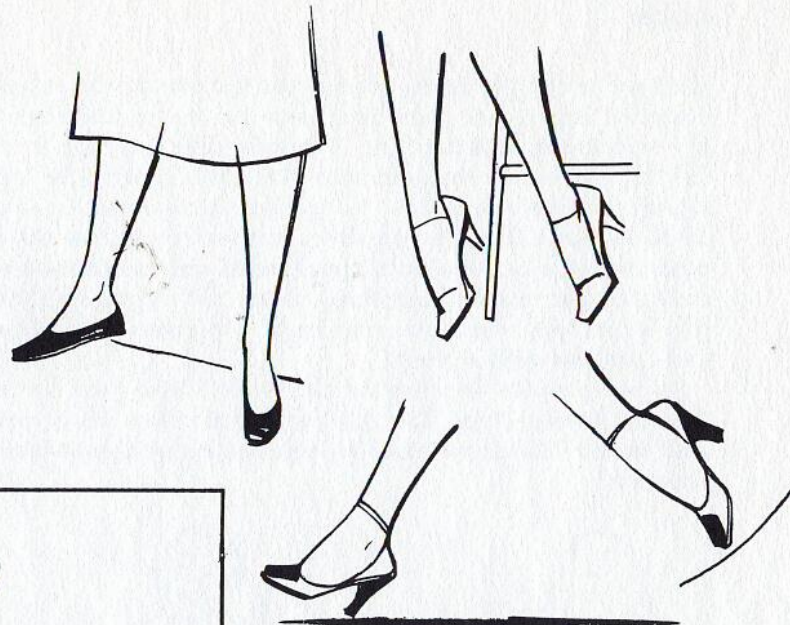
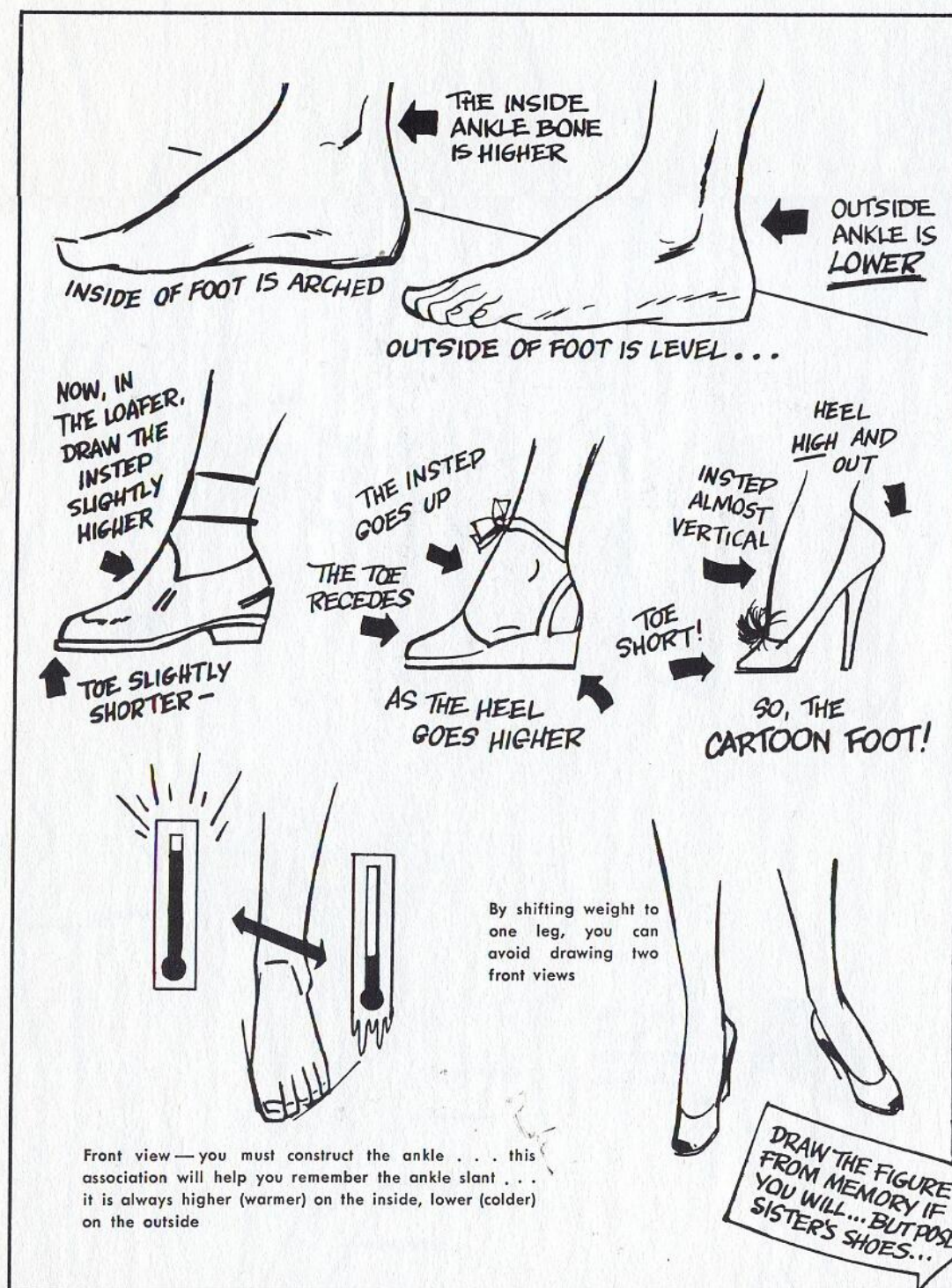




## Tricks with feet and shoes

The first step in drawing the pretty girl's feet with simple style is to study the construction of the actual foot. Our chart contains facts about feet that you should learn by heart and think about every time you pencil and ink a girl's foot.

Shoes can be complicated affairs. Your girl's shoes should be simplified and stylized down to a point where they are graceful and neat — and do not draw attention away from the rest of the figure. Remember that girls' shoes change with the seasons of the year. Follow the ads in your local paper for changing styles.



Use shadows to define action



Here is a progression from the realistic foot to the simplified drawing of the cartoon foot. Draw all types of shoes from life and simplify them like this example—shoes are important



### The pretty girl in action

The EXPRESSIVE attitude is *all-important*. Work with simple tracing paper roughs until the figure in action seems to say *exactly* what you want it to say.



Use hands whenever you can to give your idea more punch



Often in a strip panel the figure without action or the head without tilt is more eloquent. Action, here, would interrupt story

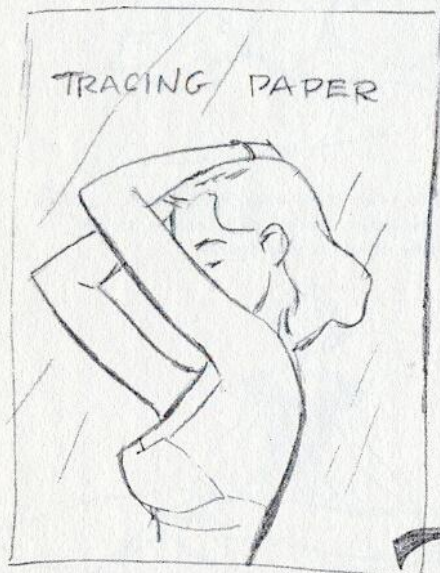
OBVIOUSLY TALKING TO A MAN

For example — a girl is fixing her hair — and speaking a line



A PARTING SHOT

THE EXACT GESTURE WILL BE IMPORTANT



SO WHAT



Turn your tracing paper often — and draw from both sides. This gives you a fresh look

MUSING



TRY POSING YOURSELF BEFORE A MIRROR

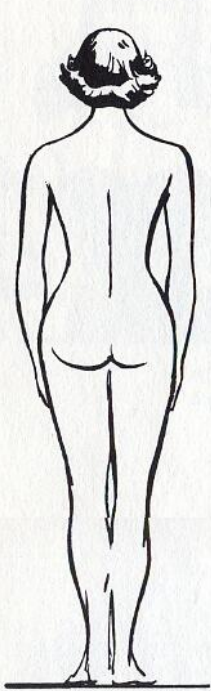


— IF YOU CAN "FEEL" THE ACTION YOU CAN DRAW IT.



### More on action

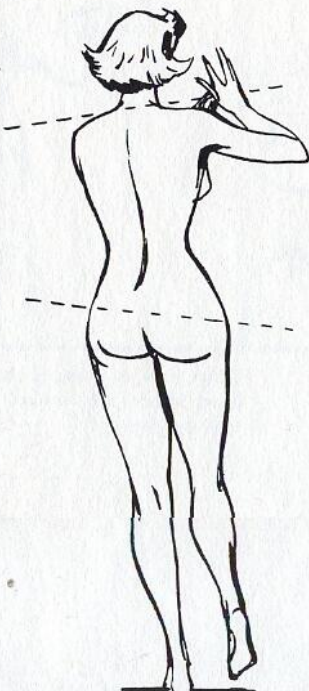
The graceful figure in action will always be in balance . . . note how the shifting weight of the figure dictates the direction and turns of hips and shoulders.



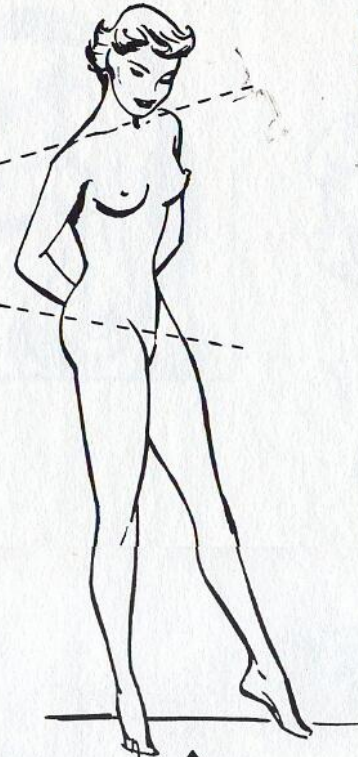
Static pose—balance is obvious



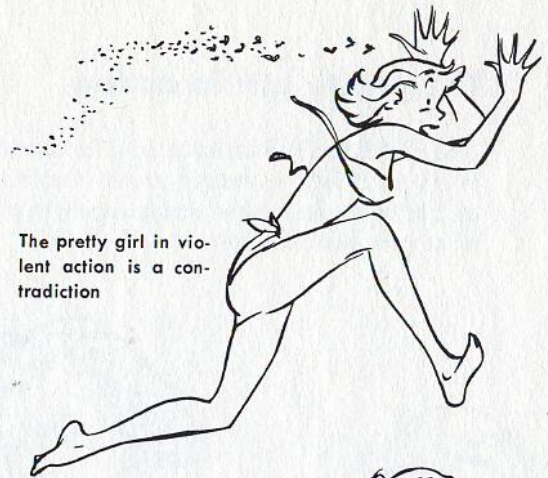
Weight on left foot. Left hip goes up



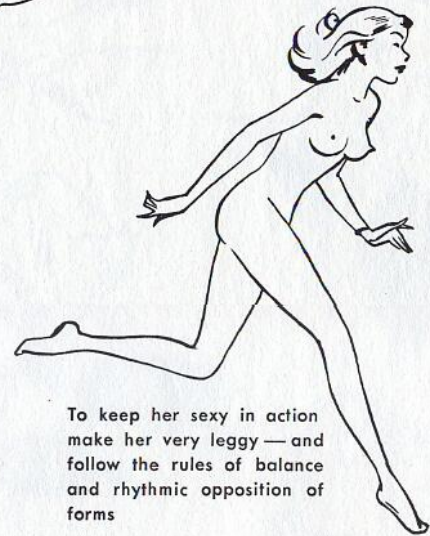
Left hip up—left shoulder down for balance



Drop a line from head center to right foot. The girl would not be in balance without extended left leg



The pretty girl in violent action is a contradiction



To keep her sexy in action make her very leggy—and follow the rules of balance and rhythmic opposition of forms



Wrinkles are forced—just to add some interest



The dress flares out from the high hip



Keep wrinkles simple and use them to accent the action



Use lively dress lines, flying scarfs, accessories darting off at angles, to give action to your figures





FAMOUS ARTISTS CARTOON COURSE  
Student Work  
Lesson 7

To study and practice

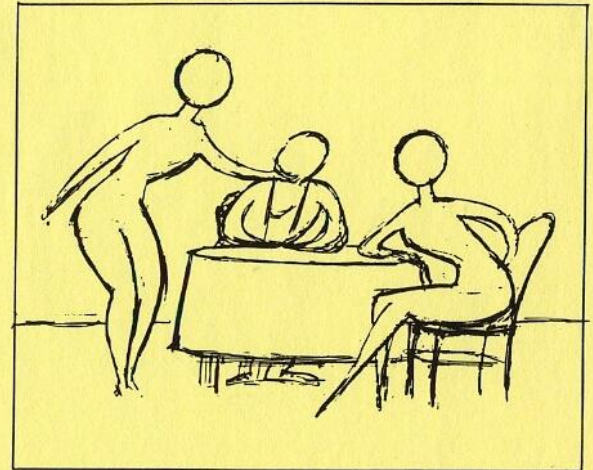
The text and examples in this lesson make up a complete and clear method for drawing pretty girls. Readers enjoy seeing pretty girls in drawings and editors know it. A lot of cartoon jobs, especially in advertising, depend on your ability to draw them.

Copy and experiment with the examples in the text. For practice, put tracing paper over photos of girls in magazines and apply the lesson's teaching by simplifying the poses down into line drawings. Keep trying for long, flowing lines that are smooth and uncluttered. Interesting little wrinkles may help the character of male cartoon figures, but they will ruin your girls. Draw your girls active and attractive. Sketching at the beach or elsewhere is good practice, so make it a habit.

We will grade this assignment on the basis of how well you draw the figures -- and how successful you are in making them glamorous and alluring.

The assignment you are to mail to the School for criticism

On a sheet of 11 x 14-inch Bristol board, rule and ink a panel 8 inches high and 10 inches wide. In it draw the following scene: A pretty girl in a close-fitting evening gown and her escort are seated in a night club. A chorus girl in very brief costume is tickling the chin of the escort, to the dismay of the first girl. Follow the little sketch at the right for composition or dream up your own. Be sure the entire figure of each girl is shown. Use either pen or brush for inking your cartoon.



Present your assignment in the same clean, professional manner you would use if you were submitting it to the cartoon buyer of a publication. Letter your name, address and student number carefully in the lower left-hand corner of the page. In the lower right corner, place the Lesson Number. Mail to:

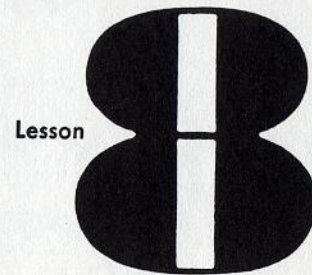
FAMOUS ARTISTS CARTOON COURSE  
Westport, Connecticut



**Famous Artists Cartoon Course**

**Westport, Connecticut**

# **Action and the figure**



**Rube Goldberg**

**Milton Caniff**

**Al Capp**

**Harry Haenigsen**

**Willard Mullin**

**Gurney Williams**

**Dick Cavalli**

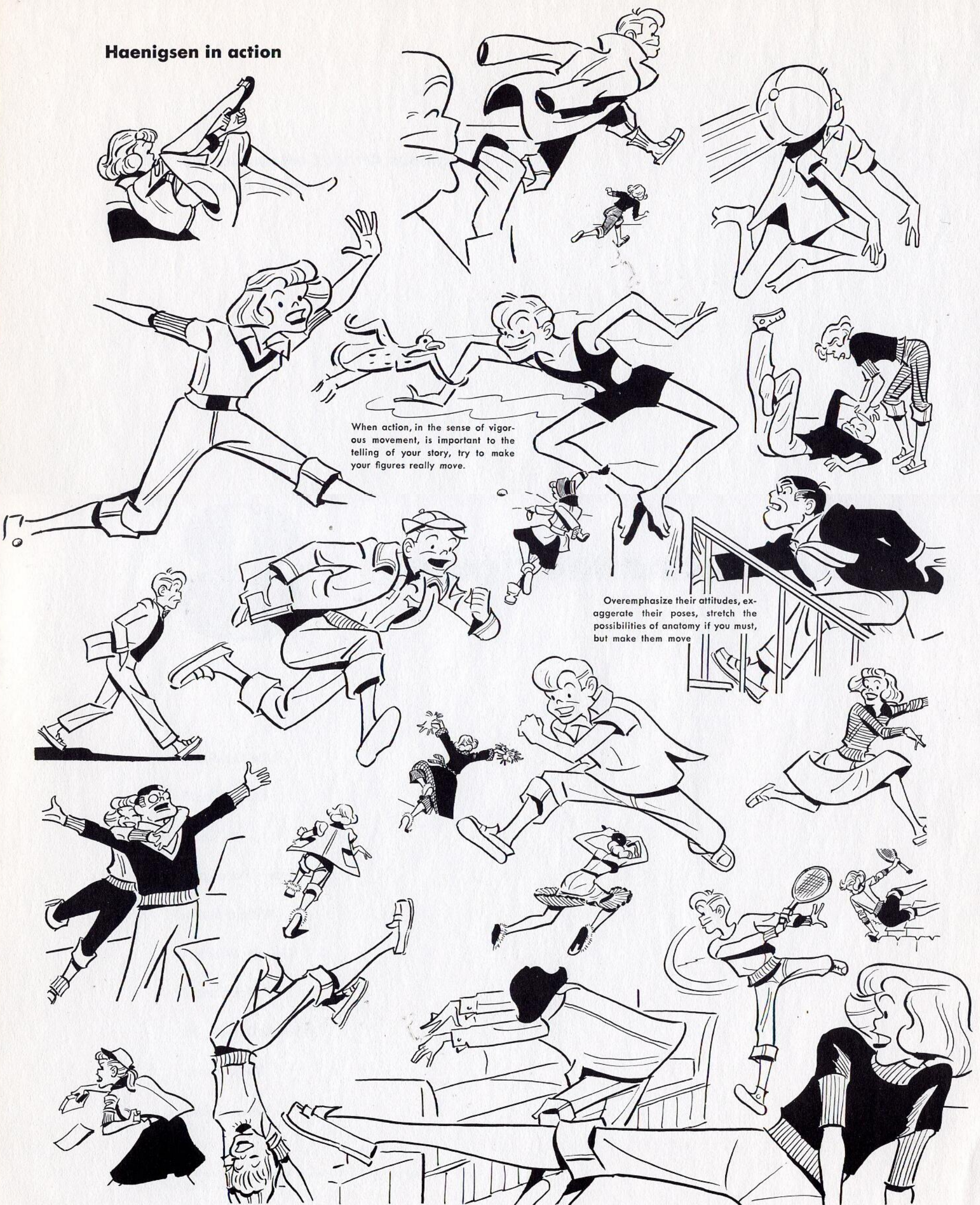
**Whitney Darrow, Jr.**

**Virgil Partch**

**Barney Tobey**



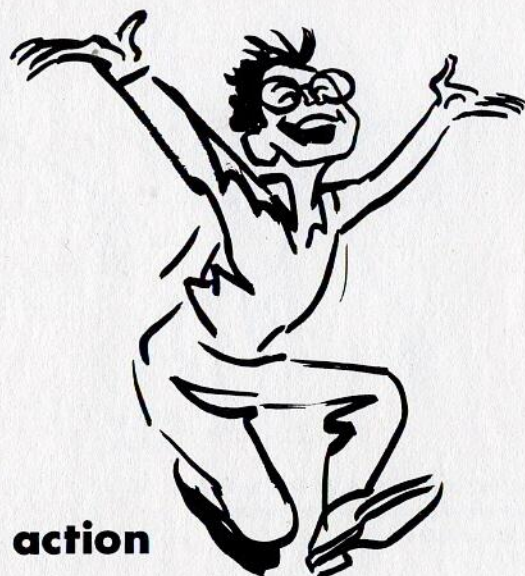
## Haenigsen in action



When action, in the sense of vigorous movement, is important to the telling of your story, try to make your figures really move.

Overemphasize their attitudes, exaggerate their poses, stretch the possibilities of anatomy if you must, but make them move





## The figure in action

Action is the key to good cartooning. Many a good idea has been ruined by badly drawn action, and many a weak idea has been strengthened and saved by humorous and appropriate action.

Action does not necessarily mean violence or exaggeration. The way a character sits in a chair is action, even if he isn't moving. Observe and note how each of your friends has his own way of slouching in a chair. A cartoonist with a realistic style must keep his action close to what the real human figure is capable of doing. Then again, an all-out comic or "big-foot" style cartoonist can do anything with the action of his figures that he can think of, or — more important — that he can draw.

Balance is the key to all good action. Only when it is in free fall is a figure not in balance. We don't mean you can't exaggerate. Exaggerate all you want — but your action will be stronger if your figure has the appearance of being in balance. A figure leaning backwards can only lean over so far before it falls on the back of its head. But, if that figure were pulling an elephant's tail, it could lean back as far as you want. The pull of gravity would be offset by the tail attached to the elephant, and the figure would still be in balance. Always consider counter-pull, or opposing forces, when drawing action.

Avoid stiff and inactive figures. Try to have your characters *doing* something at all times. In a comic strip that is carried by the balloons, don't have your figures stand or sit in the same position throughout the whole series of panels. Even if they just

scratch their heads, or use their hands while they talk — keep them *moving*. Draw them stiffly, without action, and your characters will look like window dummies. Dummies aren't alive — cartoon characters *must* be.

Speed, or expression, lines can help the figure perform its action. A running man is speeded up by a few straight lines flowing out behind, as though he were cutting a path through the air. A whap on the head with a rolling pin or brick is funnier and stronger with action lines radiating from the point of contact and surrounded by stars. The blurred effect of a vibrating punching bag can be drawn with action lines. Here again we caution you that simplicity, the basic law of cartooning, should govern everything you do. Too many speed lines and stars can start looking like spaghetti and distract your reader from the action you're trying to draw.

Single panel or gag cartoons used in national magazines usually contain a minimum of action lines. The modern panel drawings have action — plenty of it — but the action is usually toned down as the composition becomes more important in illustrating the gag line. Also, if a cartoon is done in wash or halftone, speed lines can complicate application of the tones.

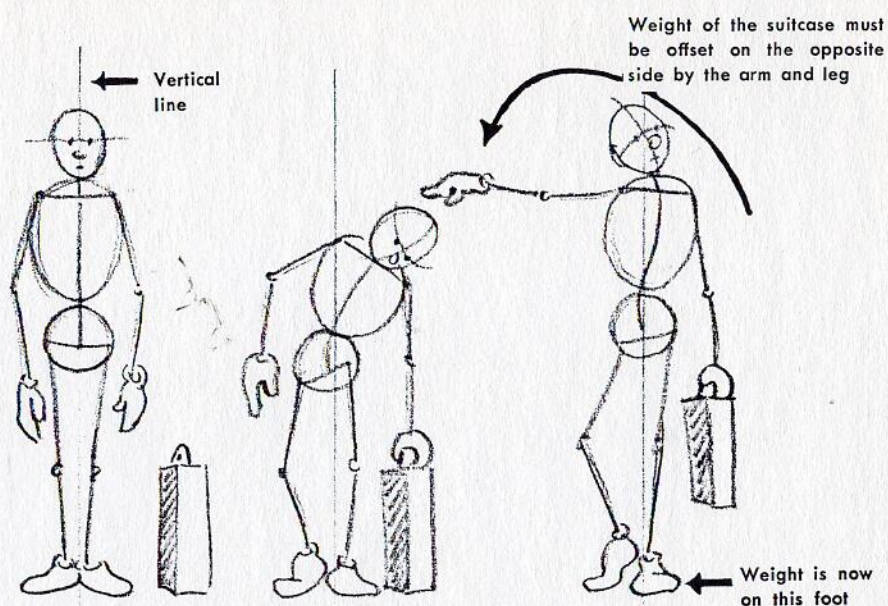
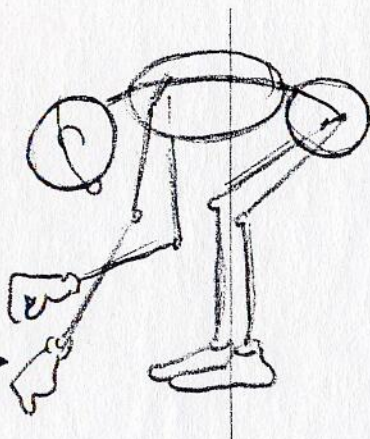
Your reader's first glance at a page must sell him on the idea of reading it. Interesting action gets attention — lack of it loses customers. Keep this in mind, have fun, and spend plenty of time on this all-important part of your cartooning.



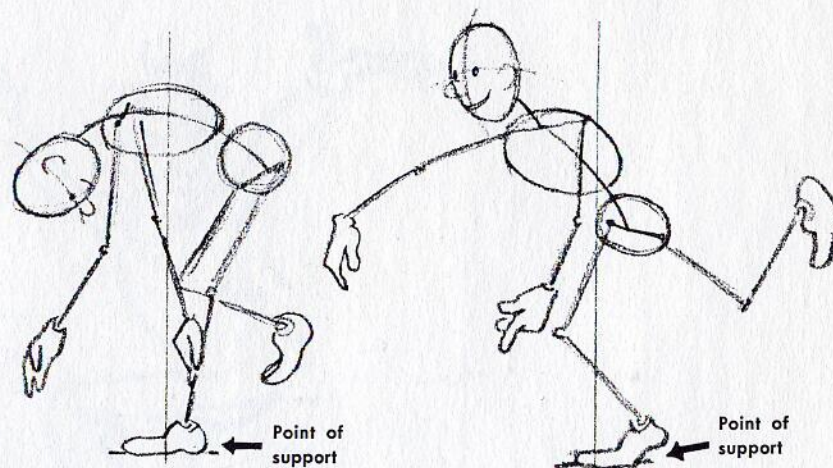
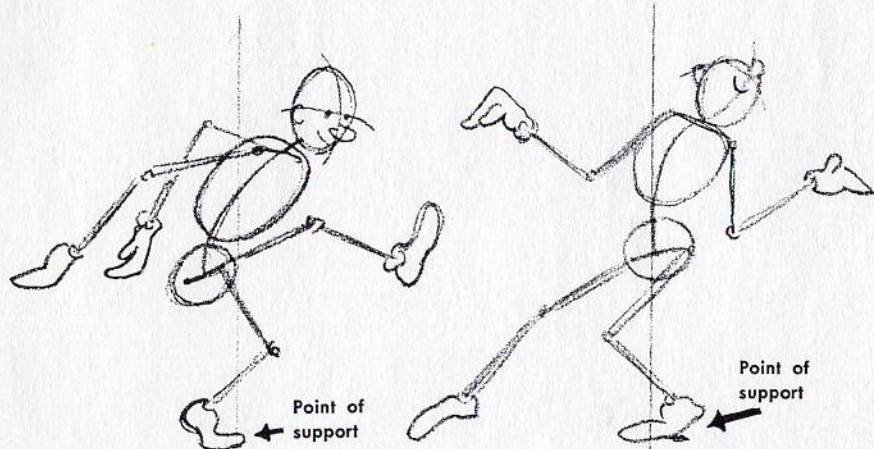
## Balance

Regardless of whether the figure is in motion, it must always appear to be in balance — except when it is in free-fall. A vertical line through your figure will help you to check this.

Weight on both feet. Point of support is between feet →



When standing erect the weight is equal on either side of the line. In bending to the side, the arm is extended on the opposite side to preserve balance



Generally, the weight of the body should be balanced over the foot or feet — or between the feet that rest on the ground and support this weight

## Milton Caniff on Action



A smallish gent like Happy Easter provides humor with lively action. He's planted solidly on that left foot — his right impels the other gentleman off balance



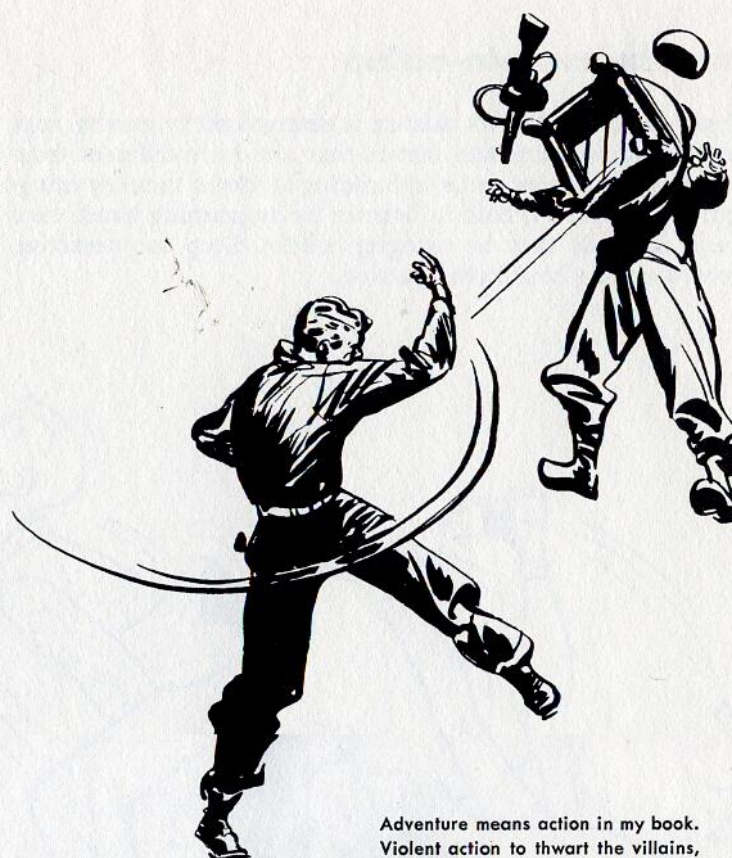
A two-figure action like this is fun to do, but takes some thinking out. Here I'd like to emphasize the importance of practicing rear view action, as well as front and side views



The young lady swinging the lead pipe is in balance — her feet are solidly planted under her and she has control of her body — and the situation

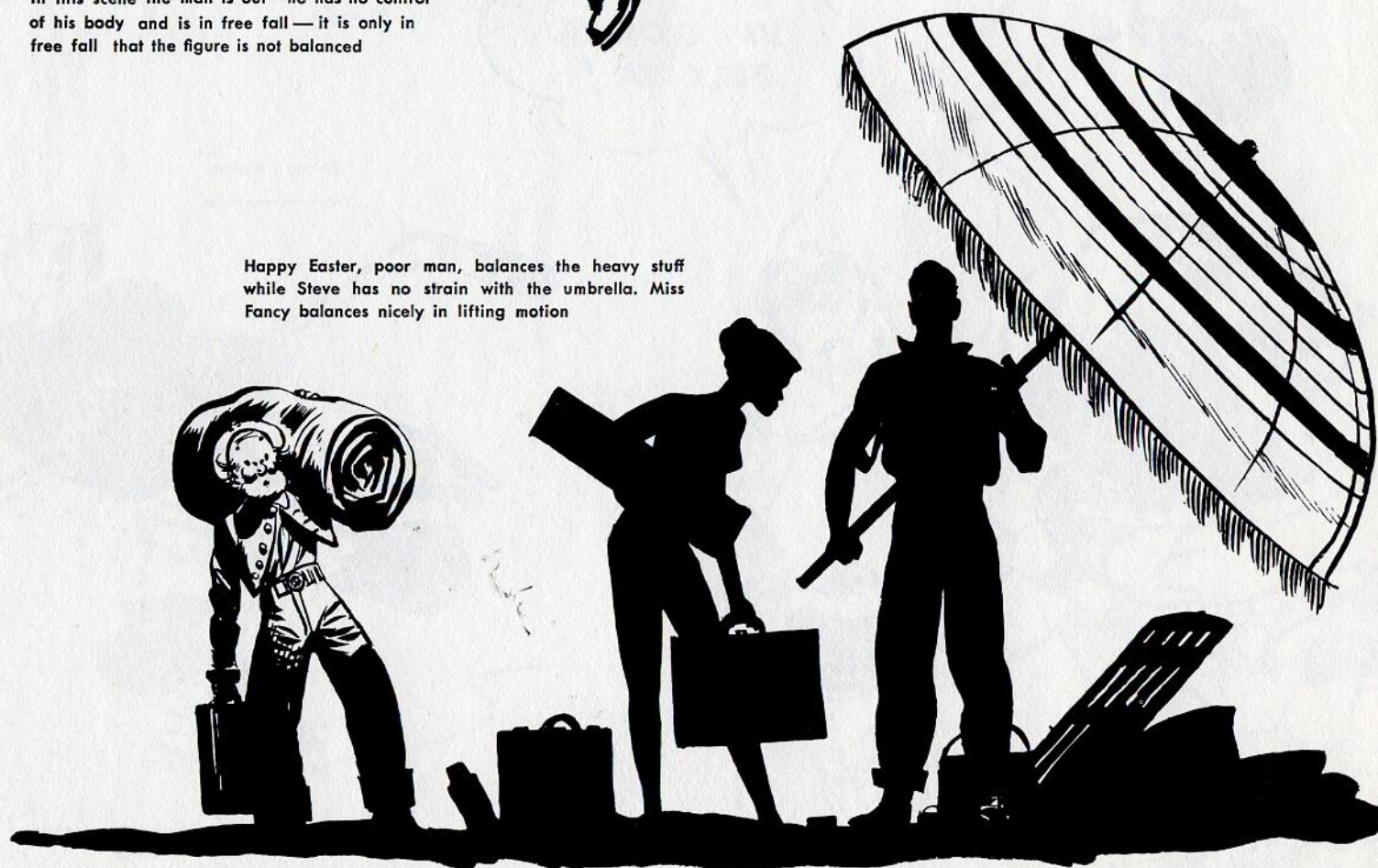


In this scene the man is out — he has no control of his body and is in free fall — it is only in free fall that the figure is not balanced



Adventure means action in my book. Violent action to thwart the villains, and lively skullduggery to get the hero in and out of jams. I stood up and took a practice heave myself to get the feel and balance here

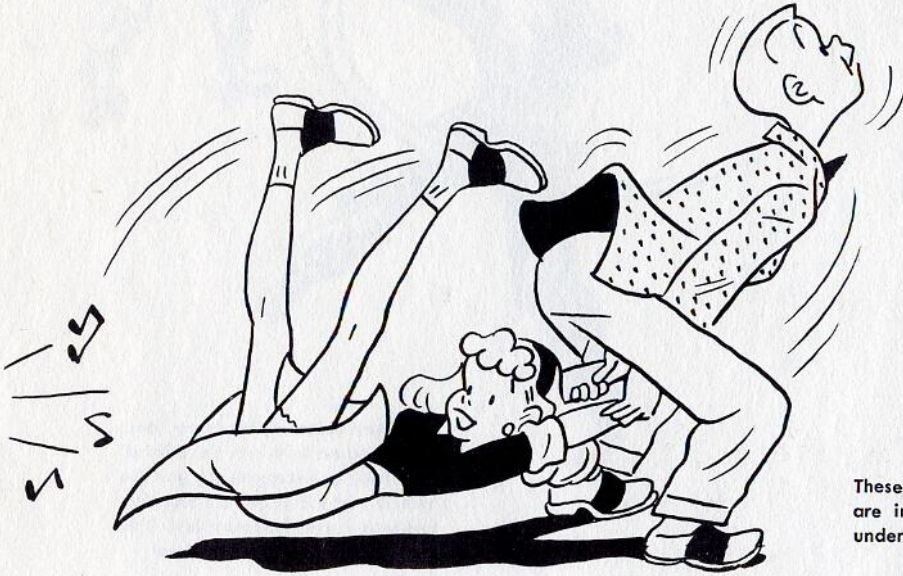
Happy Easter, poor man, balances the heavy stuff while Steve has no strain with the umbrella. Miss Fancy balances nicely in lifting motion



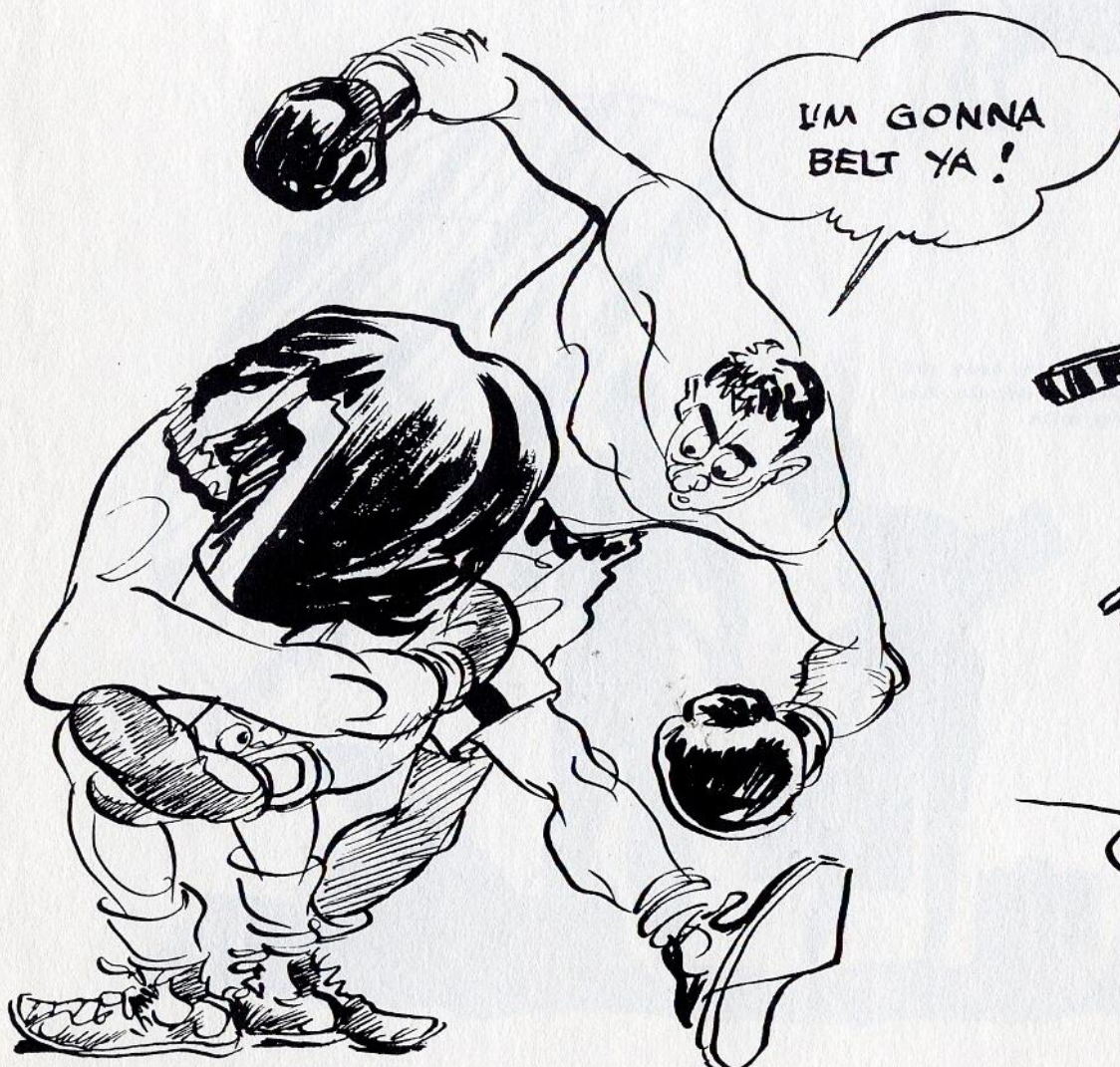


### Comic balance-in-action

When a figure moves, its balance is determined by gravity, support points, pressures and factors that are quite different from the formal balance of a pile of building blocks. A monkey swinging from a trapeze is held in balance by its grasping hand, even though its body may be swinging wildly. Keep counteracting forces in mind when drawing action.

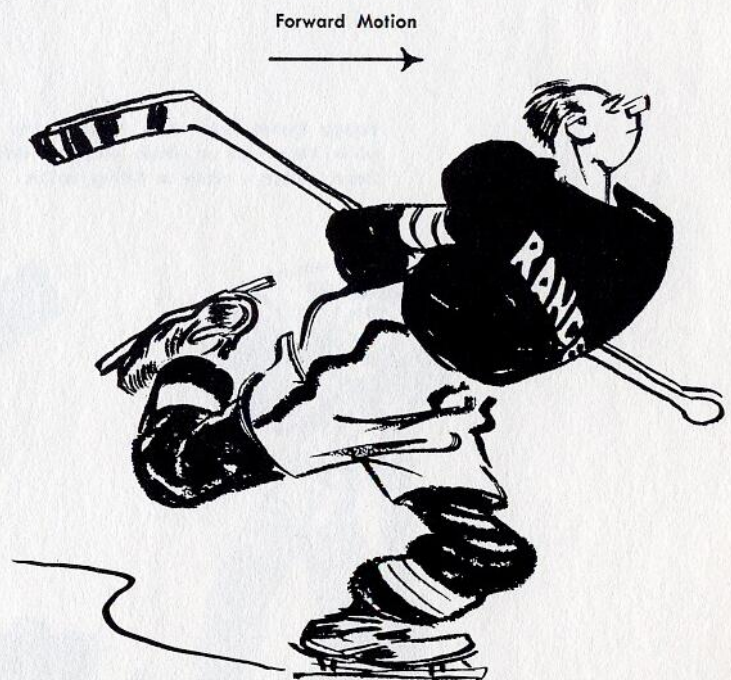


These dancing kids by Harry Haenigsen are in balance because their bodies are under control



↑ Formal balance

In these action drawings by the faculty you can see that even though the action is exaggerated the figures are balanced

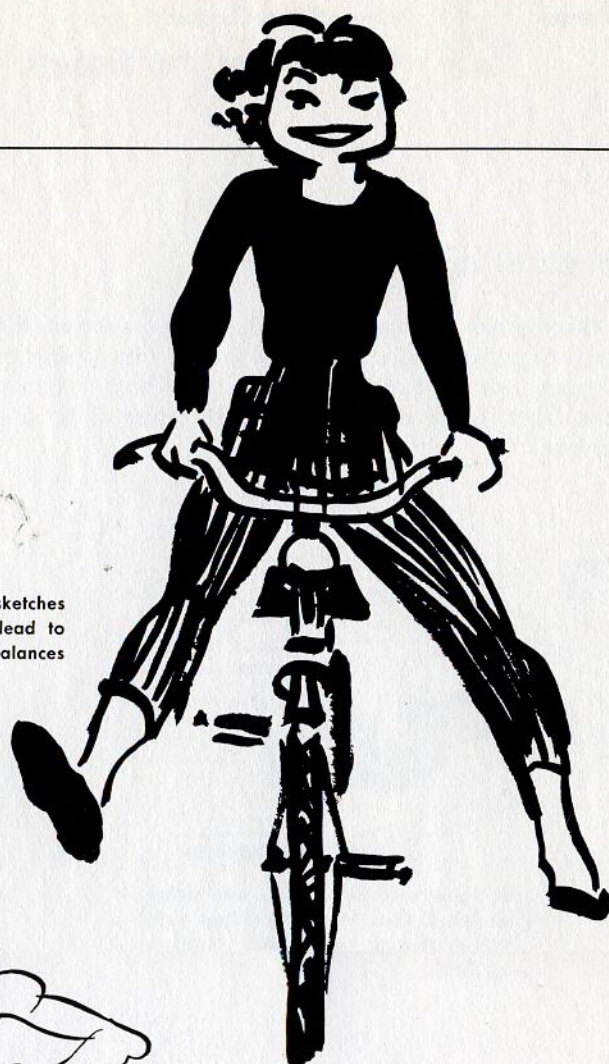


Willard Mullin is an acknowledged master of action drawing

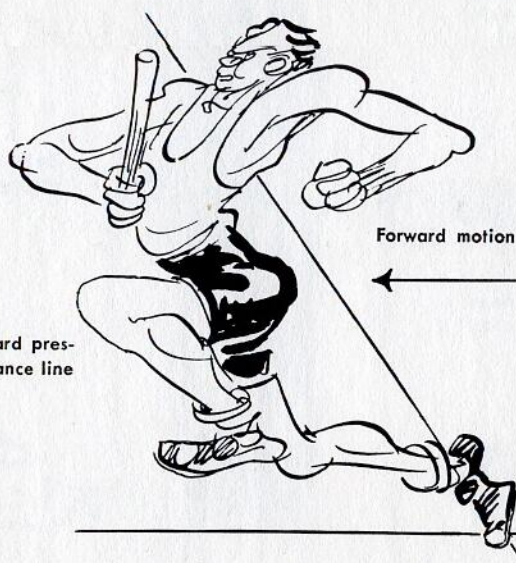




Quick, free brush sketches like this sometimes lead to new ideas. This girl balances nicely on her bicycle



In this figure by Willard Mullin there is a forward pressure against the foot on the ground, thus the balance line is slanting forward



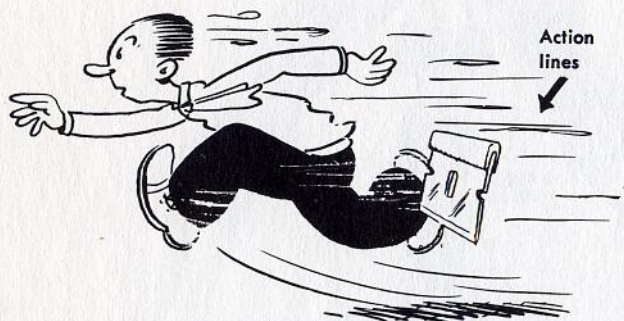
This ballet dancer by Al Capp is balanced in the air because she has control over her body — she has that toe out, ready for a landing



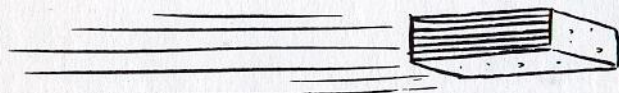


## Action or speed lines

All through your course we keep harping on action. Figures and objects in cartoons don't move — they're immovably printed on the page. But, you can give them the *illusion* of motion with action lines. Here are some basic examples of action lines for your use.

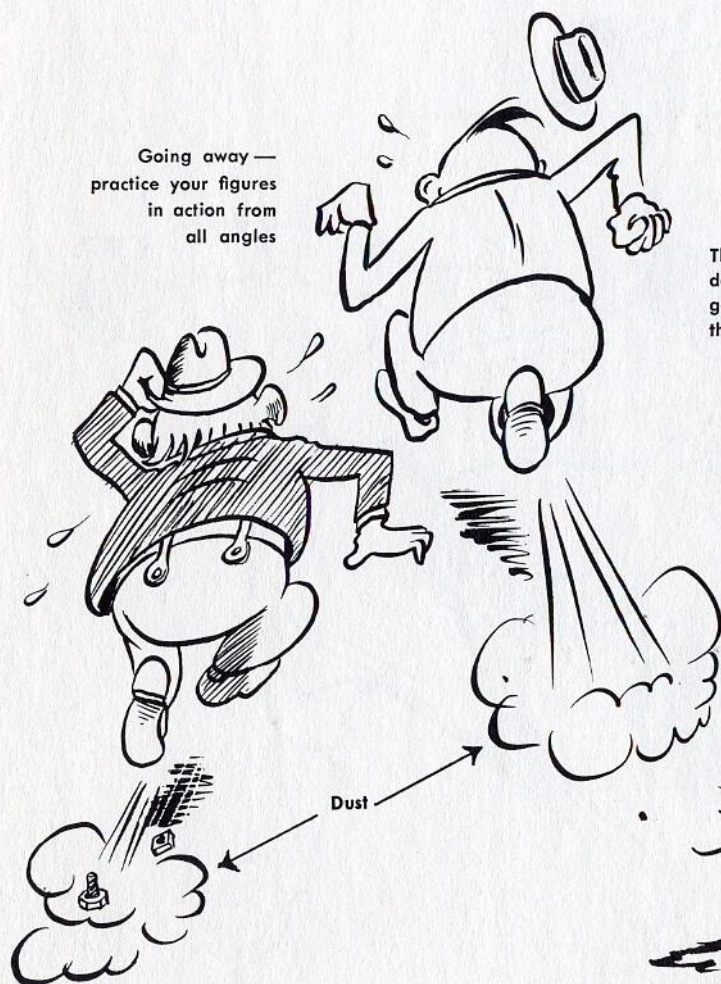


This figure was fully drawn, with action lines inked. Then white action lines were scratched through and behind it with a razor blade

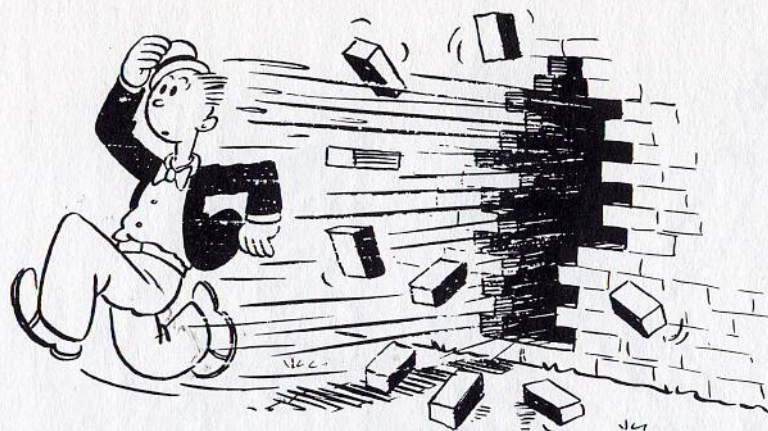


On bricks, etc. in transit, it helps to have the shading lines go in the same direction as action lines.

Going away —  
practice your figures  
in action from  
all angles



This young man is going down fast. He could also be going up or sideways—turn the picture



Speed lines made with pen and long razor blade scratches — or Chinese white — into black of the hole

A grand old  
standby →



Radiating lines from point of  
action, with stars and sweat

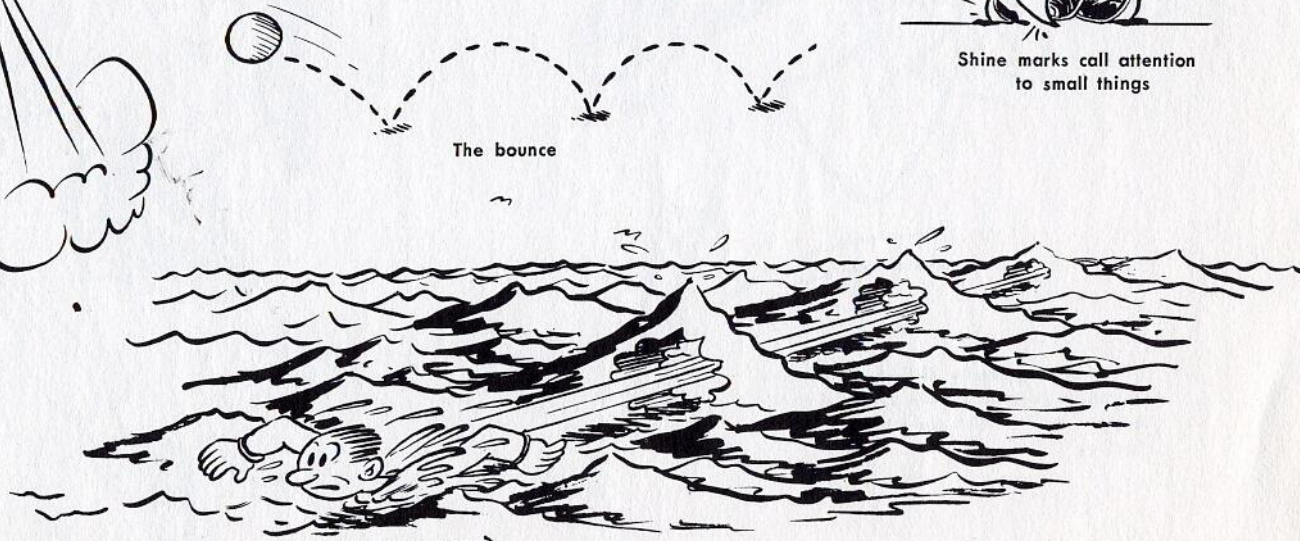


His head is still vibrating  
and the lump is risen and  
shining



Shine marks call attention  
to small things

The bounce

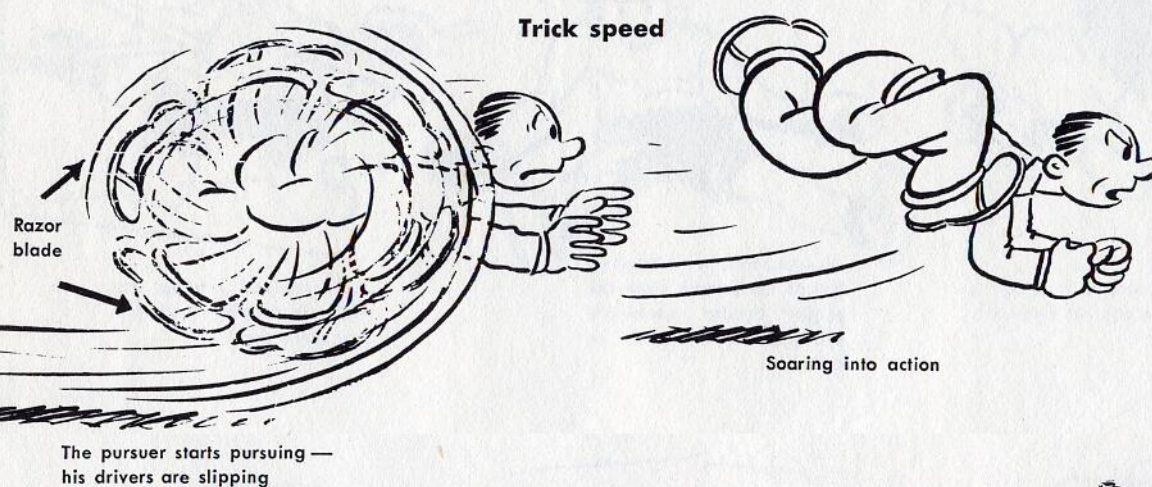
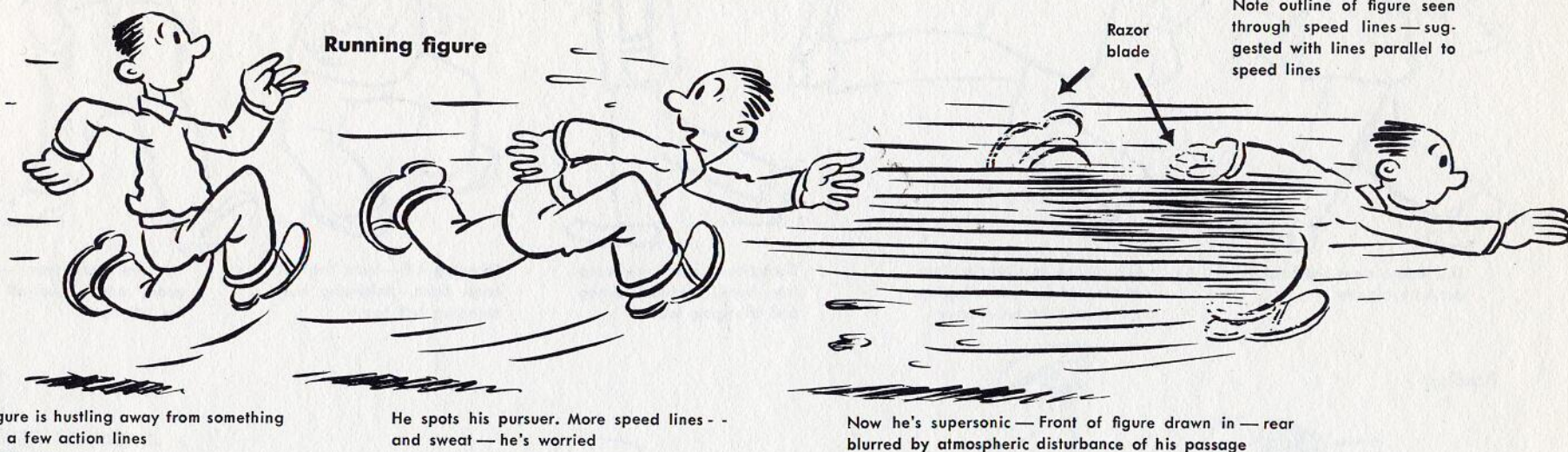


No one could swim this fast, but those  
holes in the water sure give the impression  
of speed



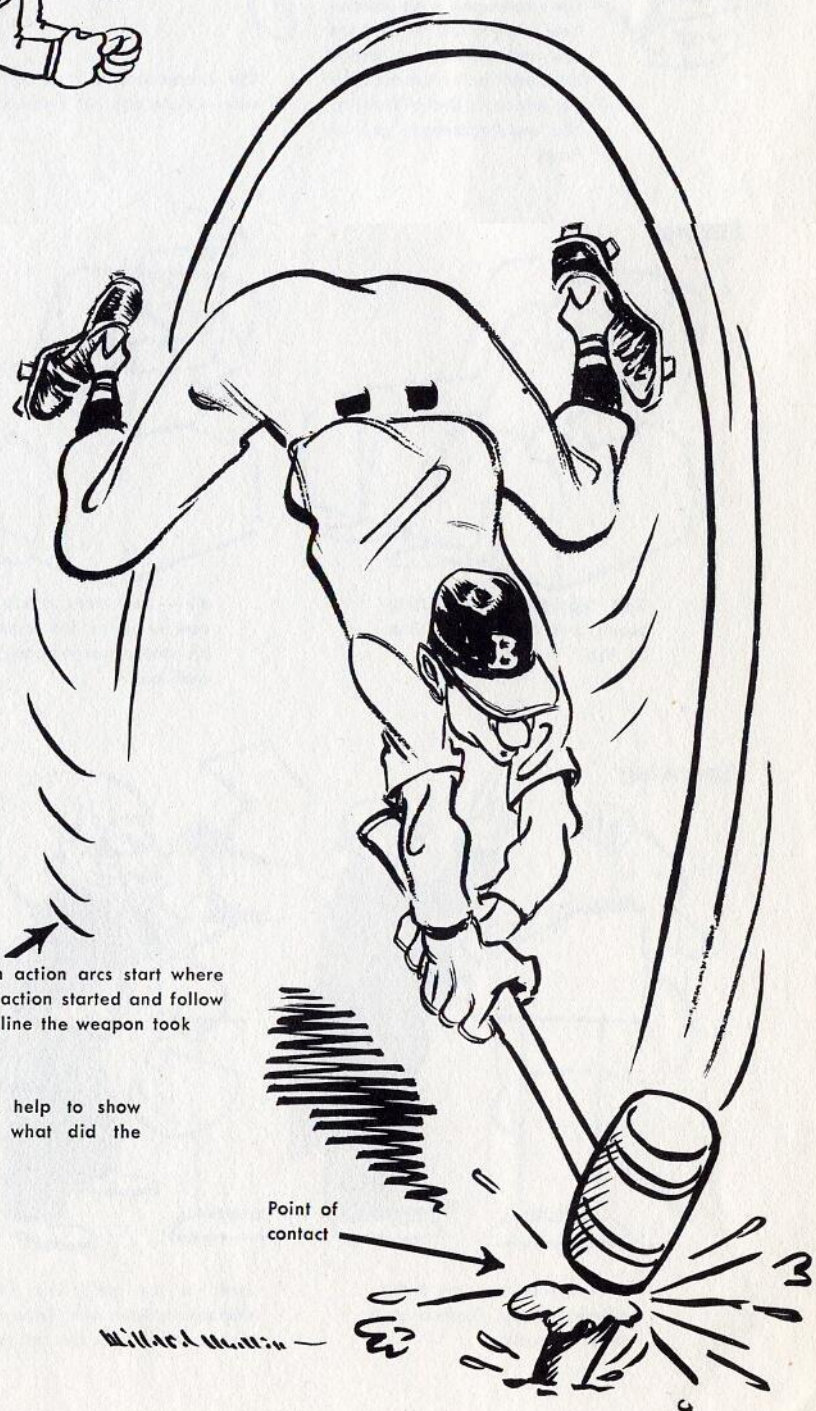
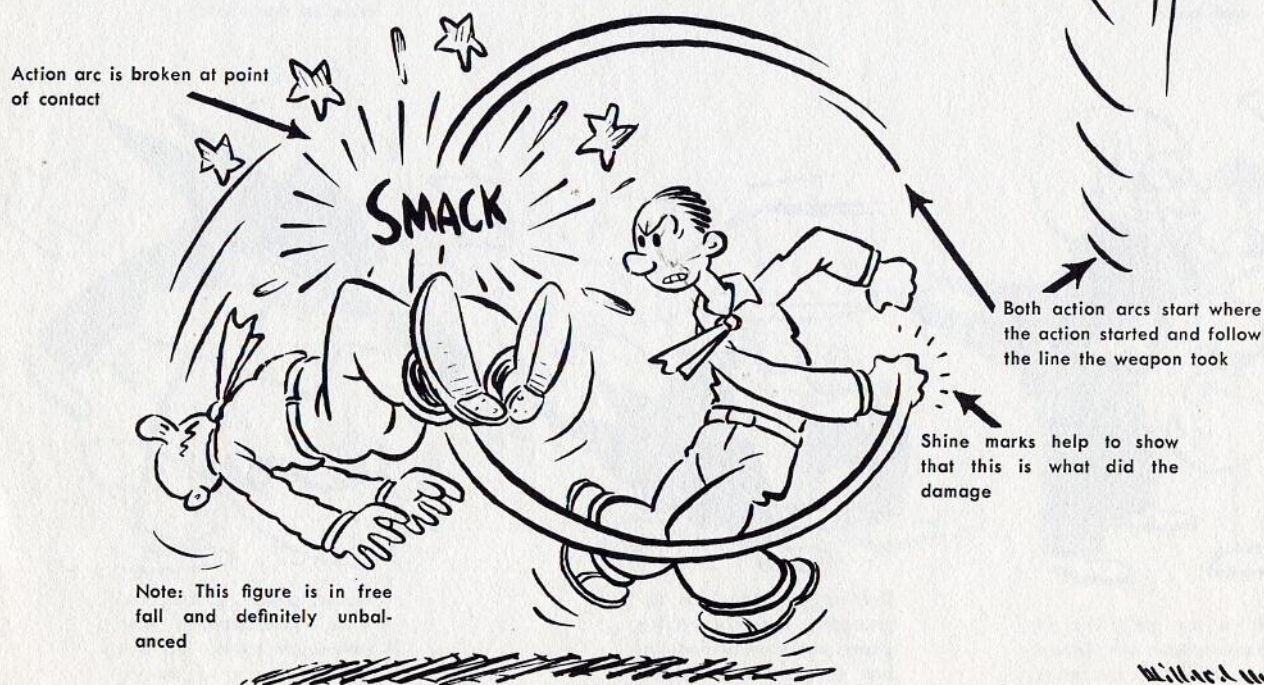
## The chase

In the old two-reel comedies and today's animated cartoon movies you always see a chase. Chases are exciting and funny. The customers love them and you should, therefore, be able to give them what they want. Practice your running figures until you, too, can have 'em rolling in the aisles.



## Sock and smack

The action of both figures on this page is basically the same — they are both hitting something. The only difference is that the point of contact with the stake driver is at the end of the action arc. The fighter's action arc is interrupted half-way by the other gentleman's chin — then it keeps going, because the hitter is full of vitamins.





## Walking



This figure steps out briskly, but with dignity



This fellow is either on top of the world or just stepping out of an Irish tea-shoppe



Dejection is shown by hanging head, general droop, and dragging foot

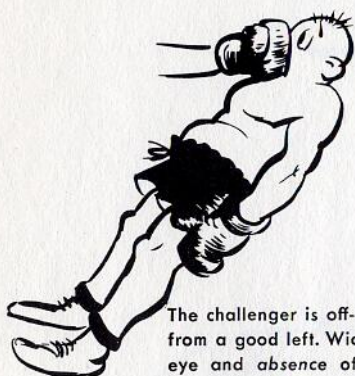


Stepping off — note the left hand back, balancing out-swinging left foot



The nonchalant type — a good, sturdy push-off with the left foot

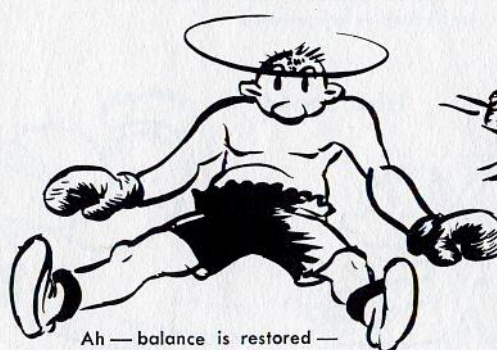
## Boxing



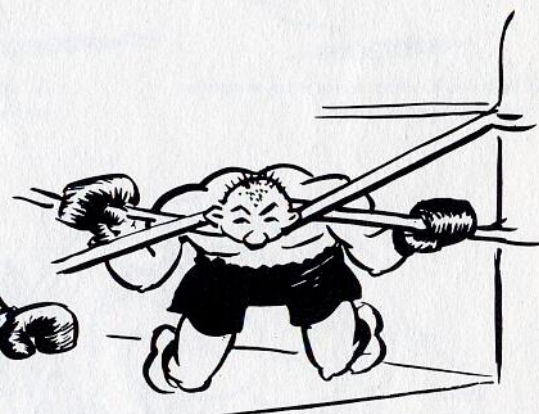
The challenger is off-balance from a good left. Wide open eye and absence of action lines add to the solemnity of the moment. Under-drawing, like understatement, can be funny



Our character is in free fall now — definitely off-balance

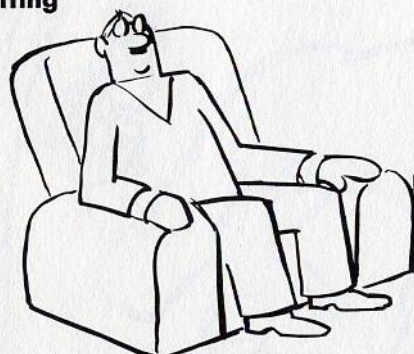


Ah — balance is restored — flat on the canvas. Note the single circular speed-line showing bewilderment or daze



He's stopped moving, but there is definitely action in our boy's pose

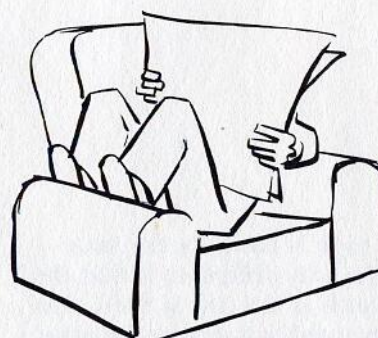
## Sitting



Bolt upright. He's sitting down, but there's no action to him



Ah — he's more comfortable now — notice the action in his smoke and natural body-position

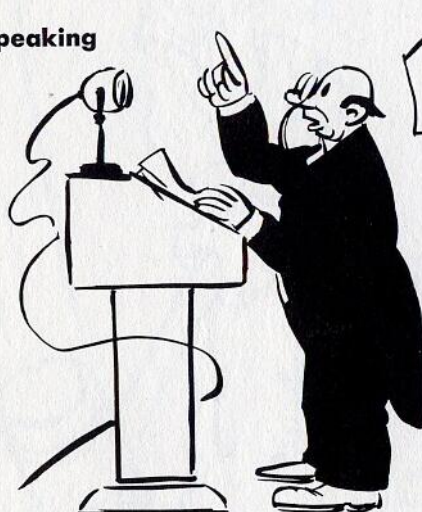


Right at home with the sports news. His wife will howl at those feet on the furniture



He has just heard a few thousand well-chosen words on a dull subject — but he's living in that chair!

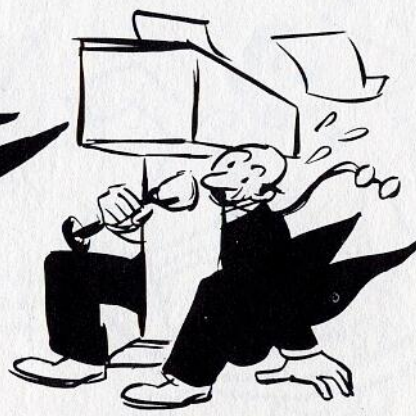
## Speaking



The address starts on a dignified keynote. Rostrum and speaker upright



Look at the action-line of that microphone wire! Papers and coattails help the action



Ducking the eggs from appreciative audience. Flying paper, sweat drops and ribbon on glasses are accents to action



Figure, papers, glasses, rostrum, microphone, and clothes are flying. This is a real climax to a rousing speech



## Action by the faculty



HAENIGSEN



In Milt Caniff's adventure strip, adventures mean action







### Action plus by Willard Mullin

When it comes to exaggerating action, Willard Mullin is a master. Each of these figures is in violent motion — and each is different. The key to the over-all movement here is the curved edge of the track itself, with black accents on the figures helping the eye to move down and around. The arms and legs of the individual figures are also plotted to help your eye around the curve.

Here, all wrapped up in one drawing, is a complete lesson in figure-action, anatomy and composition. Study it well and try to get some of this freedom of action into your own work.



FAMOUS ARTISTS CARTOON COURSE  
Student Work  
Lesson 8

To study and practice

In this lesson you learn the principles of action. Realistic or comic, in whatever style you draw, action is important. Interesting action will attract the reader's eye and, by itself, give him a chuckle. Without animation, any character will look like a store-window dummy -- and there are no successful cartoons being drawn about lifeless dummies.

There is no other way to develop the knack of drawing figures in lively, interesting action than to draw them ... over and over again ... in as many different positions and actions as you can dream up. Use pencil on any kind of sketching paper. Don't become too concerned with "noodling" unimportant details in these figures. Instead, try to express the over-all action as simply and graphically as possible.

Harry Haenigsen's sketches on page two illustrate only a few of the countless actions the figure can perform. Make drawings from them and other figures in your textbooks to understand the tricks of giving the illusion of movement to the cartoon figure. As you draw, study and analyze the actions -- don't merely copy. Note the forward lean of the figure and opposing twist of shoulders and hips in running actions; how twisting and bending the torso eliminates the otherwise static quality of seated or standing figures; the foreshortening of many parts of the figure which occurs in the Milton Caniff and Willard Mullin drawings of violent action; and the use of speed lines to point up and accentuate paths of movement.

In addition to making pencil sketches of many different figures in action, you should concentrate on refining the action in a particular figure. A good way to do this is to use tracing paper. Place one of your action drawings under the top sheet of your tracing pad and redraw it. As you do, eliminate any unessential lines and accentuate those which help tell the story of the action. You may find it desirable to repeat the process and carry the refinements further on a second or even third tracing. It is also good to hold your drawing up to a mirror and look at it in reverse. You then see it with a fresh eye and can more easily see what is right and what is wrong with the action.

Besides practicing with pencil sketches, try drawing some of your figures directly with either pen and ink or brush and ink because the quality of the line you use can do much to strengthen the action. Make the ink lines flow and move in any way that will help bring out the movement of the figure.

Don't overdo the use of speed lines. They alone will not make your figures move -- they are merely accents to help emphasize action. Make the lines of the figure -- its clothing, the hair, etc. -- follow the line of action.

After you've made many of these sketches (and not before!) draw the following assignments for this lesson. Our criticisms of your work will be based on (1) how well you express the figure actions, (2) how well you draw the figures themselves and (3) your use of instruction given in previous lessons.

The assignments you are to mail to the School for criticism

ASSIGNMENT 1

On a sheet of 11 x 14-inch Bristol board, measure off and ink a panel 7 inches high and 9 inches wide. In it, with pencil and then with ink and pen or brush, do a three-quarter front view of a man in the act of falling. He has just tripped over a brick on the sidewalk while running at full speed. Use everything you've learned to make this drawing as full of action and humor as you possibly can. Keep your picture simple. To tell your story, all you need draw is the falling action figure, the brick and the sidewalk on which he is about to land.

IMPORTANT - Mark this sheet ASSIGNMENT 1.



FAMOUS ARTISTS CARTOON COURSE  
Student Work  
Lesson 8

ASSIGNMENT 2

On a sheet of 11 x 14-inch Bristol board, measure off another panel 7 inches high and 9 inches wide. In it draw two running figures, side or three-quarter view -- a frightened young man and a pretty girl. He is carrying a bouquet of flowers and running away from the girl, who is just about to catch him. Use either pen or brush for inking. For this assignment we want you to use your own imagination to create a solid-looking panel cartoon with lively, active figures.

IMPORTANT - Mark this sheet ASSIGNMENT 2.

Present your assignments in the same clean, professional manner you would use if you were submitting them to the cartoon buyer of a publication. Letter your name, address and student number in the lower left-hand corner of each drawing. In the lower right corner, place the Lesson Number and Assignment Number. Mail to:

FAMOUS ARTISTS CARTOON COURSE  
Westport, Connecticut



**Famous Artists Cartoon Course**

**Westport, Connecticut**

# **Clothes and folds**



**Rube Goldberg**

**Milton Caniff**

**Al Capp**

**Harry Haenigsen**

**Willard Mullin**

**Gurney Williams**

**Dick Cavalli**

**Whitney Darrow, Jr.**

**Virgil Partch**

**Barney Tobey**





Here is one character cartooned in six different techniques. In each drawing the problem of handling clothes and their wrinkles is solved differently — but each of the treatments is based on solid knowledge of the real thing.

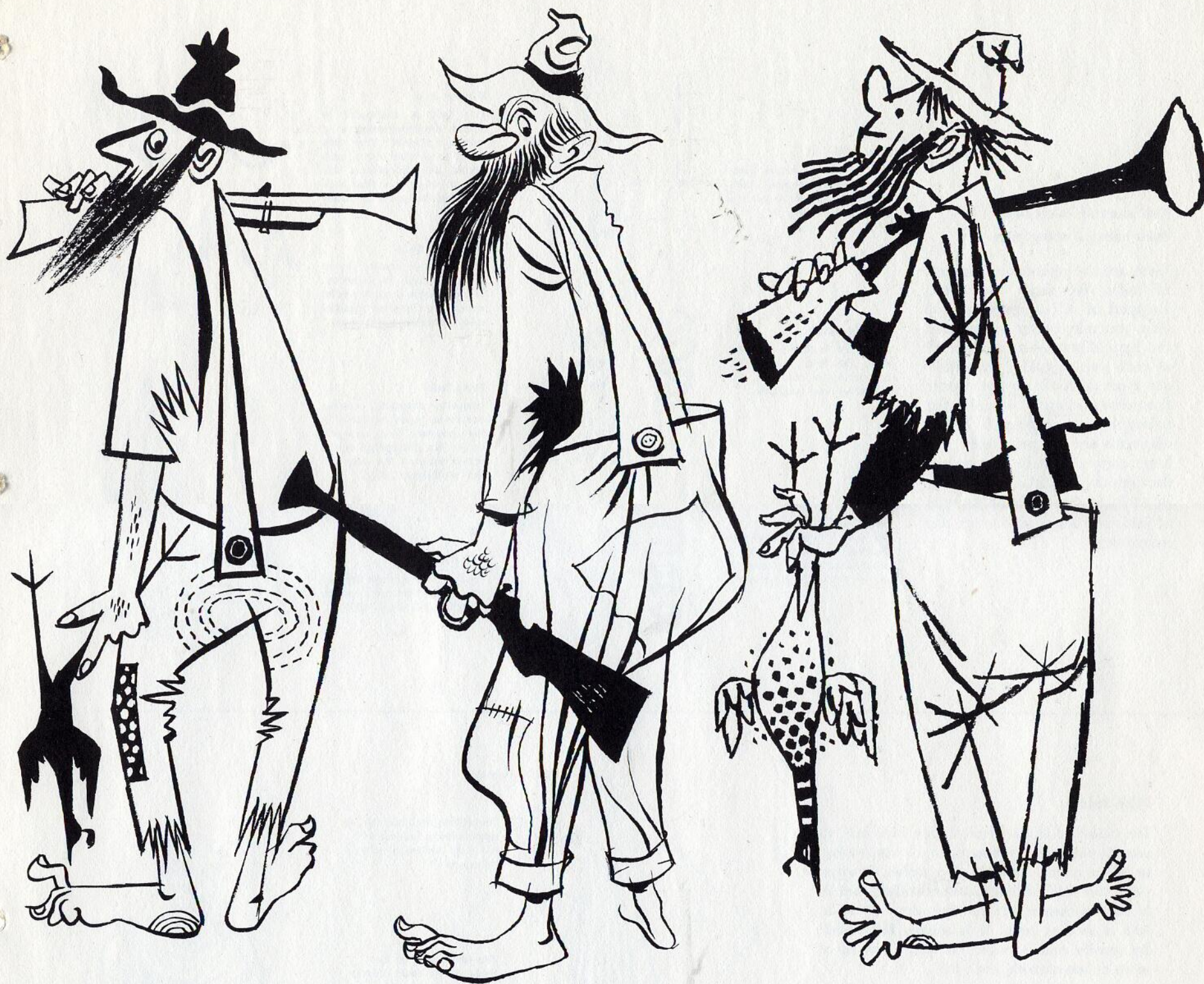
In this lesson, you'll learn how to draw clothes and folds realistically, as done in the adventure style and how to apply these principles to less realistic cartooning. Whatever style you use, your cartooning of clothes will be more convincing if you understand the basic principles of folds

## Clothes and folds

A cartoonist is concerned mostly with the doings of people, and most people wear clothes. Therefore, you must develop the ability to draw clothing of all types. You have learned how to simplify the human form: you must now learn how to simplify the clothes that go around that form. Study the effect that the action of the figures has upon the clothes due to twisting and pulling. A cartoon figure in action will twist, pull, rip and wrinkle the clothing. Remember you are not drawing a fashion plate. You are drawing an ordinary person whose clothes don't always fit him too well.

When drawing clothing on a figure, whether real comic or the adventure type, the most important thing to remember is that you are drawing a *three-dimensional* form. You are not drawing the clothing on a flat surface—the clothing goes around the figure and is in back of it as well as in front of it. The





sleeves and legs of a garment are hollow cylinders. Any pattern drawn on these cylinders must be drawn to suggest the true shape of the garment. As with perspective, you are faced with the problem of transferring a three-dimensional form to a two-dimensional surface without losing the three-dimensional effect. The wrong application of folds and patterns on a comic figure can kill the illusion of depth which you have created by the outline of that figure. Properly drawn clothing and patterns, on the other hand, will give additional depth to your drawing. When clothing the female figure, you will find that the little tension lines that you add around the breasts, hips, etc., will add much to the effect of the figure. It doesn't hurt to suggest the leg under the skirt.

Also, when drawing the female figure, the styles of the times must be kept in mind. Even though you are drawing a comic, it is important that the clothing be up-to-date. Half of your readers are women and if your styles are ten years out of date, they will soon lose interest in your feature. Here again, your

morgue plays a very important part. Keep a good, active file of Women's Clothing and see that it's kept up-to-date at all times. Good sources for this type of material are mail-order catalogues, fashion magazines and even daily newspapers. As with everything else you draw in cartooning, simplify the woman's dress. Don't attempt to make an exact copy of any dress or design you see advertised in a newspaper or a magazine. If it is an original design, you might be sued by the dress manufacturer—you don't want to end up in the jug. The length of skirt is particularly important when drawing the female figure. Skirts have a habit of changing lengths radically from year to year, and a cartoonist who is drawing a daily feature and working several months ahead must develop a knack for foretelling the future.

The following pages will not only be of value to you right now, but will continue to be of value to you during the years to come. Styles may change, but folds never do. Make a habit of referring back to these pages whenever you are working with clothes and need a refresher.

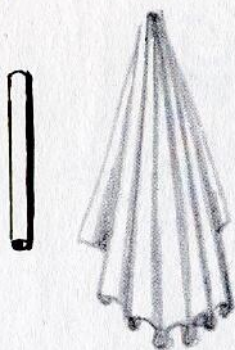


### The laws of folds and their simple diagrams

Here are the geometric diagrams of folds. We show you these, stripped of all nonessentials, so that you may better understand the *basic* direction and structure of each one. Actually the different types of folds *do not* repeat themselves *exactly* — only the principles are repeated. These diagrams are the principles. We hope they will help you to see through the irregularities present in all folds, regardless of the type of fold, and allow you to see the structure.

#### Pipe fold

This is not an exact pipe, but a tubular-shaped fold. It must be drawn to have a cylindrical feeling



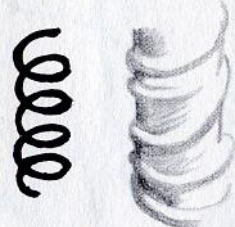
#### Zigzag fold

One fold is fitted into the next. The folds are usually contrasting in direction, are repetitive and interlock



#### Spiral fold

This fold is usually tubular in structure, but has a feeling of continuity in an ascending or descending manner



#### Diaper fold

This fold is triangular in shape, dropping away in a curving manner from one point to another on a horizontal line. Sometimes this has an angular, rather than a curved change of direction



#### Half-lock fold

This fold is caused by a sharp change in direction. The emphasis is on the point where the direction changes and the slack areas meet



#### Drop fold

Irregular dropping, creates numerous types of folds in the process. The emphasis is on the **dropping** action rather than on the detail of the individual fold



#### Inert fold

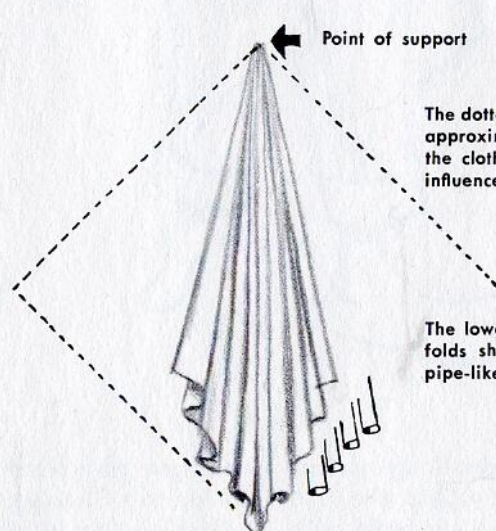
These folds are characterized only by the horizontal surface on which they are resting



### Pipe fold

The pipe fold is the simplest form of drape. It usually occurs from one point of suspension or when pulled between two points. Always draw this fold with the understanding that it is the *condensing* of a large area of cloth into a smaller area. It is usually influenced by gravity and is under no strain, having a more or less smooth, even flow.

Here we illustrate the pipe folds by stretching them between two points. The folds fan out and get larger at the center



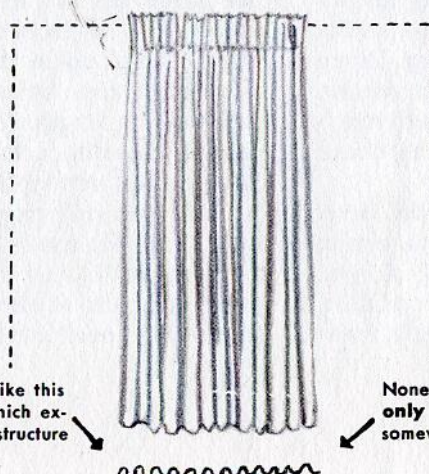
The dotted line indicates the approximate fullness of the cloth before gravity influences it

The lower part of the folds shows their round, pipe-like structure

A drape or curtain is gathered together at the top

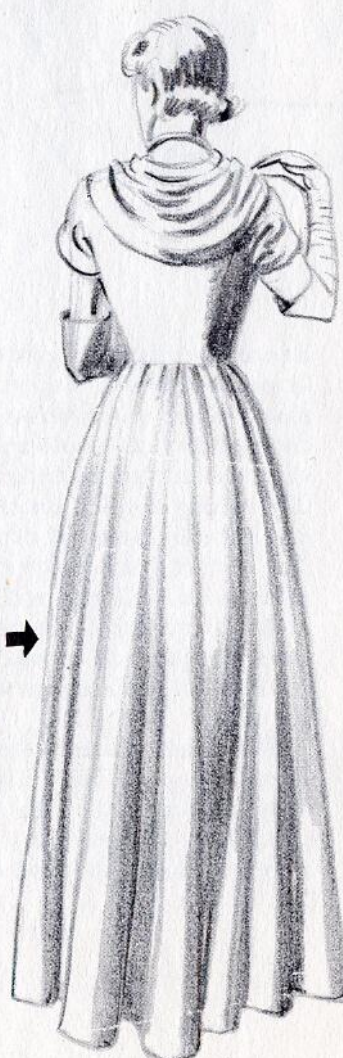
This is the area of cloth that is condensed in the drape by gathering it at the point of support

The cloth looks like this from the end, which explains the pipe structure



None of the cloth is removed. It is **only condensed**. Cloth **must** go somewhere. It has to fold

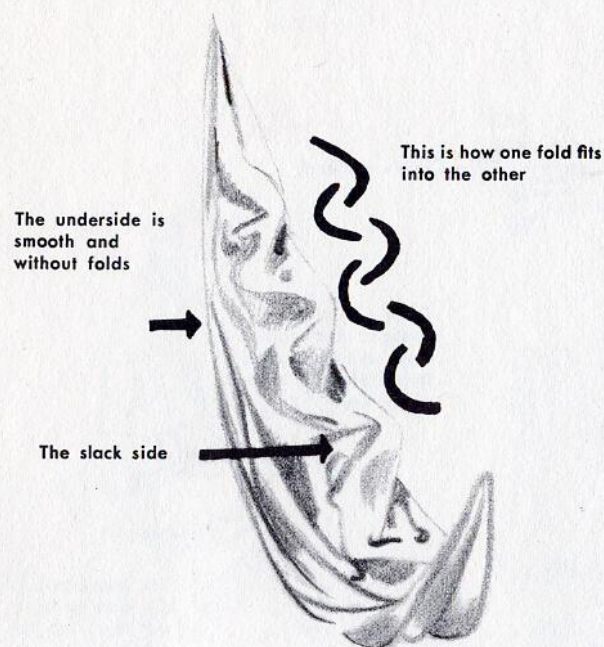
The fullness in this garment is gathered around the waist, which is the point of support. The pipe folds gradually fan out and radiate downward. Folds in a garment will vary in width when the action of the figure changes



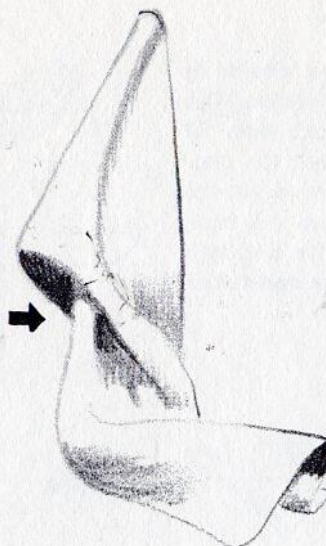


### Zigzag fold

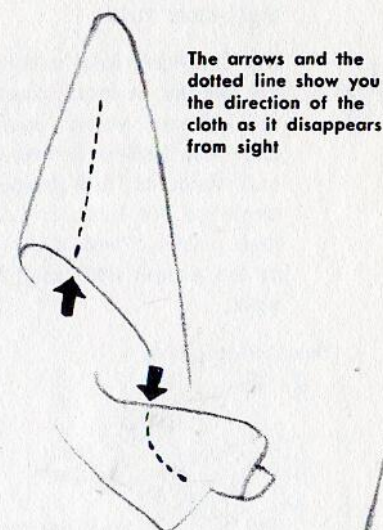
This fold usually occurs when a pipe fold is bent. The zigzag is on the slack side of the bend. This slack buckles in an uneven criss-cross way. It occurs because there is an uneven twisting of the fold that sets up a sharp, interlocking zigzag. These zigzags may not be even. The main thing is to keep the character and direction of the repetition.



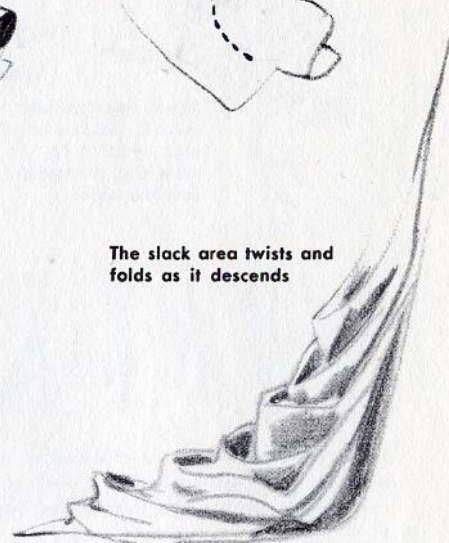
Study the way this part of the fold wedges into the next part



Each slack section folds in contrast to the next one. It is caused by the twisting of the cloth

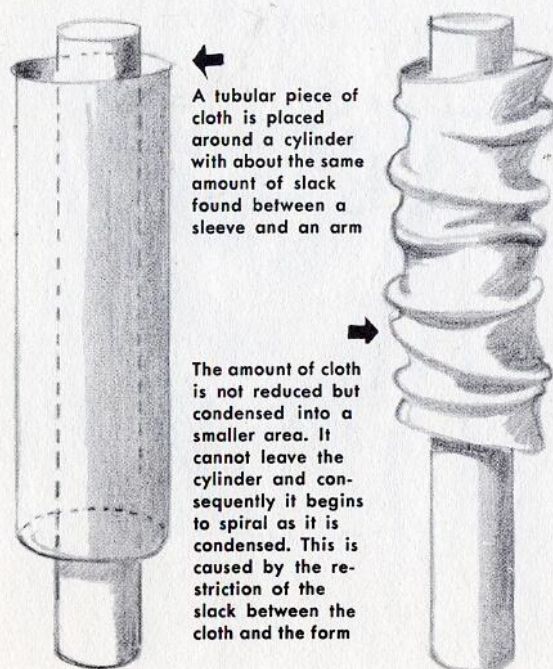


The arrows and the dotted line show you the direction of the cloth as it disappears from sight

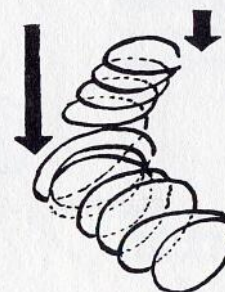


### Spiral fold

This fold is usually wrapped around a tubular form. It will change direction as the points of support and tension vary from place to place. Sleeves and trouser legs present good examples.



The direction of the spiral is toward the slight tension. If the tension increases, the spiral will tighten. Spiral folds must appear to revolve around a form. Study the diagram and see how the dotted lines follow the spiral around the unseen side of a form



Notice how the spiral fold follows the form and changes its angle where the form changes its direction. When drawing, follow this "through" in the manner shown in the diagram in the upper right



By twisting, cloth can create spiral forms in itself and have no solid form underneath it

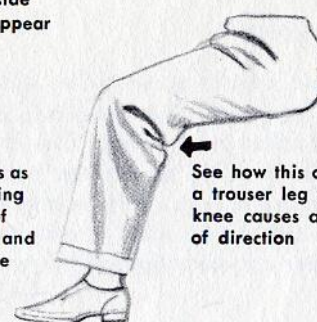
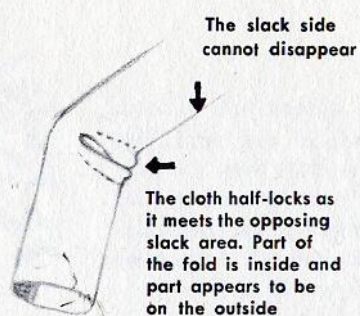
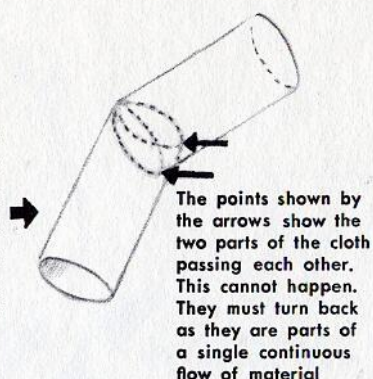




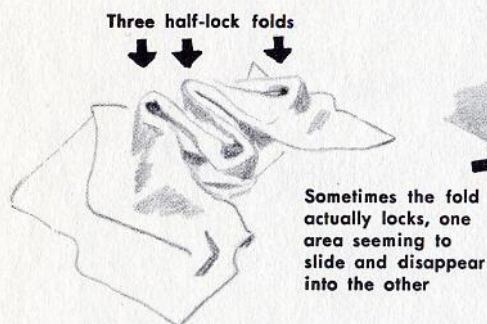
### Half-lock fold



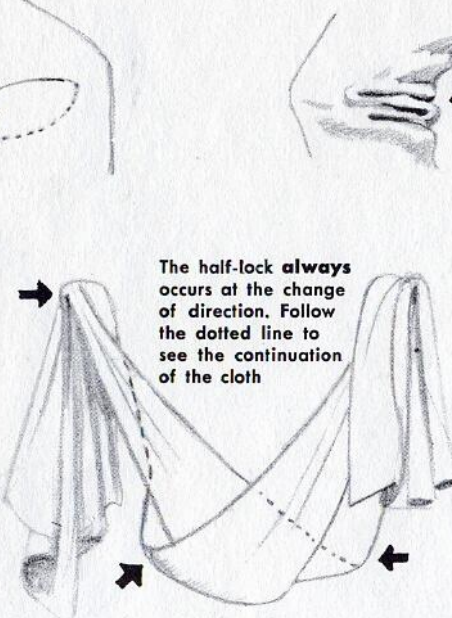
The half-lock fold occurs when tubular or flat pieces of cloth change direction. The fold always occurs on the slack side. To draw the half-lock, first sketch in the general form of the drape. Next mark the angle of the turn. This is where the half-lock occurs. Then draw the rise and turn of the excess cloth as it folds in and out of sight.



Three half-lock folds



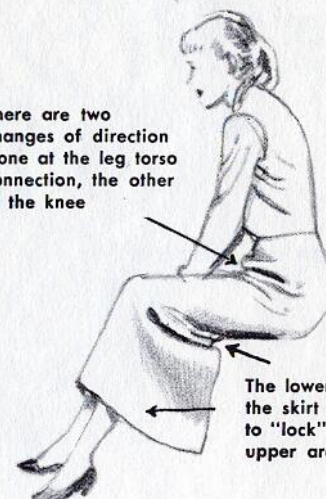
Notice that the angle and direction of these half-lock folds are only slightly irregular. The change of direction here is mostly in the fold itself caused by the slackness in the cloth



Double half-lock



There are two changes of direction — one at the leg torso connection, the other at the knee

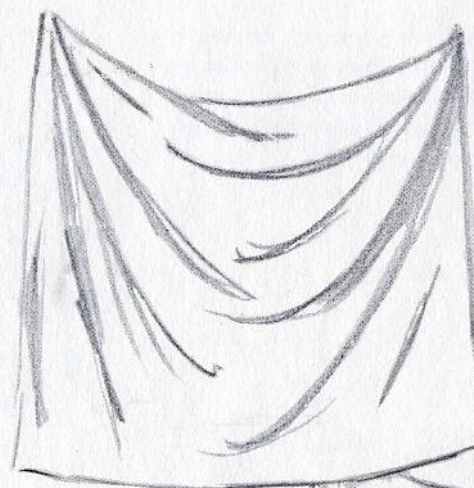
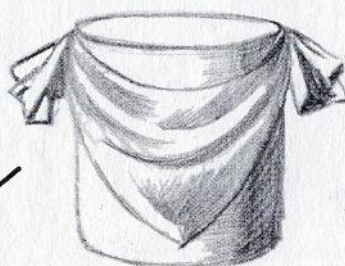


### Diaper fold

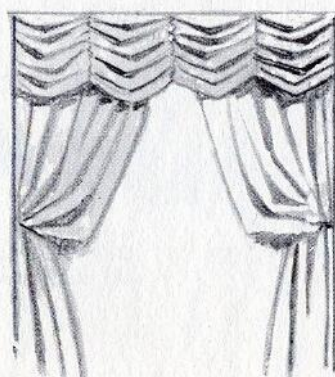
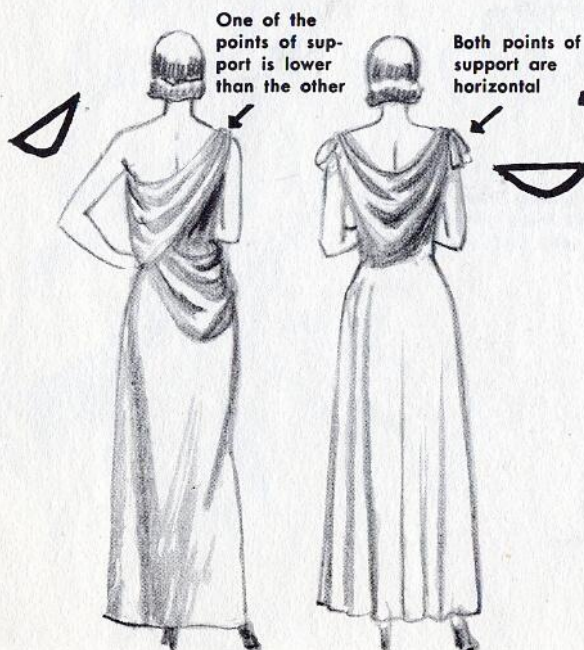


From two points of support, the diaper fold occurs at the break or turn of the cloth. This is usually on a wide, flat surface, rather than on a tubular piece of cloth. Always draw this, accenting the sweep of the curve. The top of the curve is usually sharp, and the lower side of the fold is softly shaded. The angle and roll of the fold will change in character with different qualities and weights of material. As the points of support vary, the angle of the dip changes.

Diaper folds drape halfway around a cylinder



When drawing a diaper fold, start by roughly indicating the direction of the fold as it radiates from the points of support. Then proceed to model it with shading without losing its direction

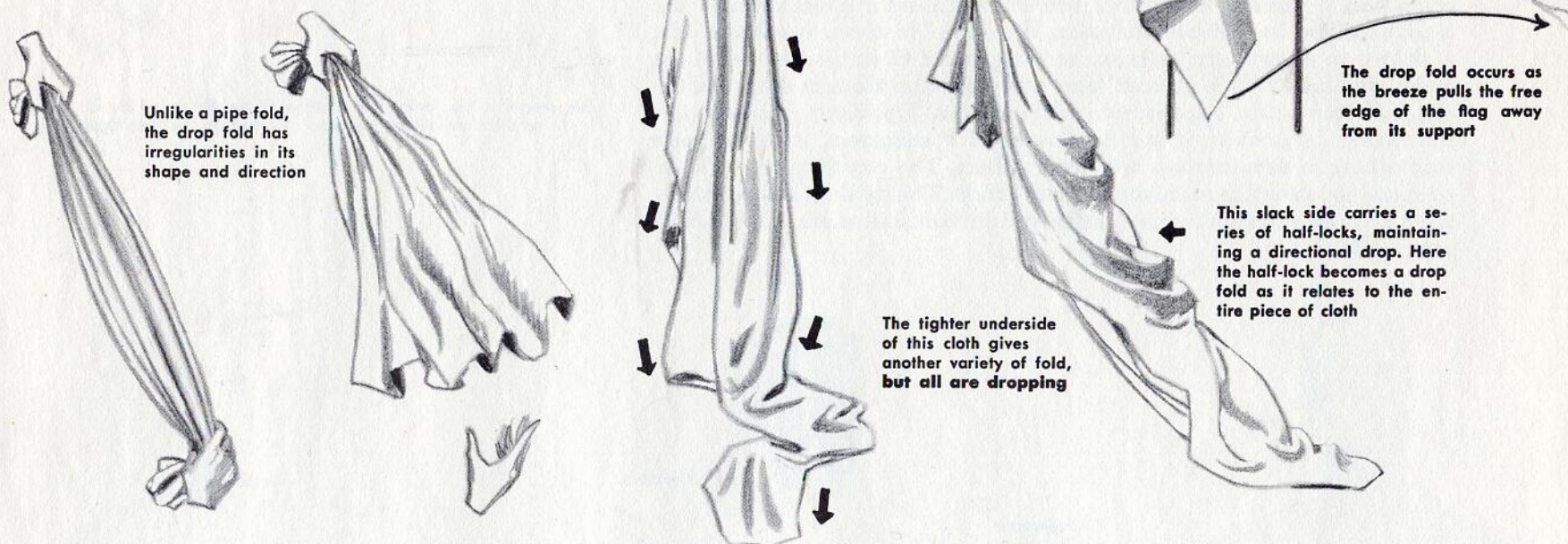


A series of diaper folds in curtains



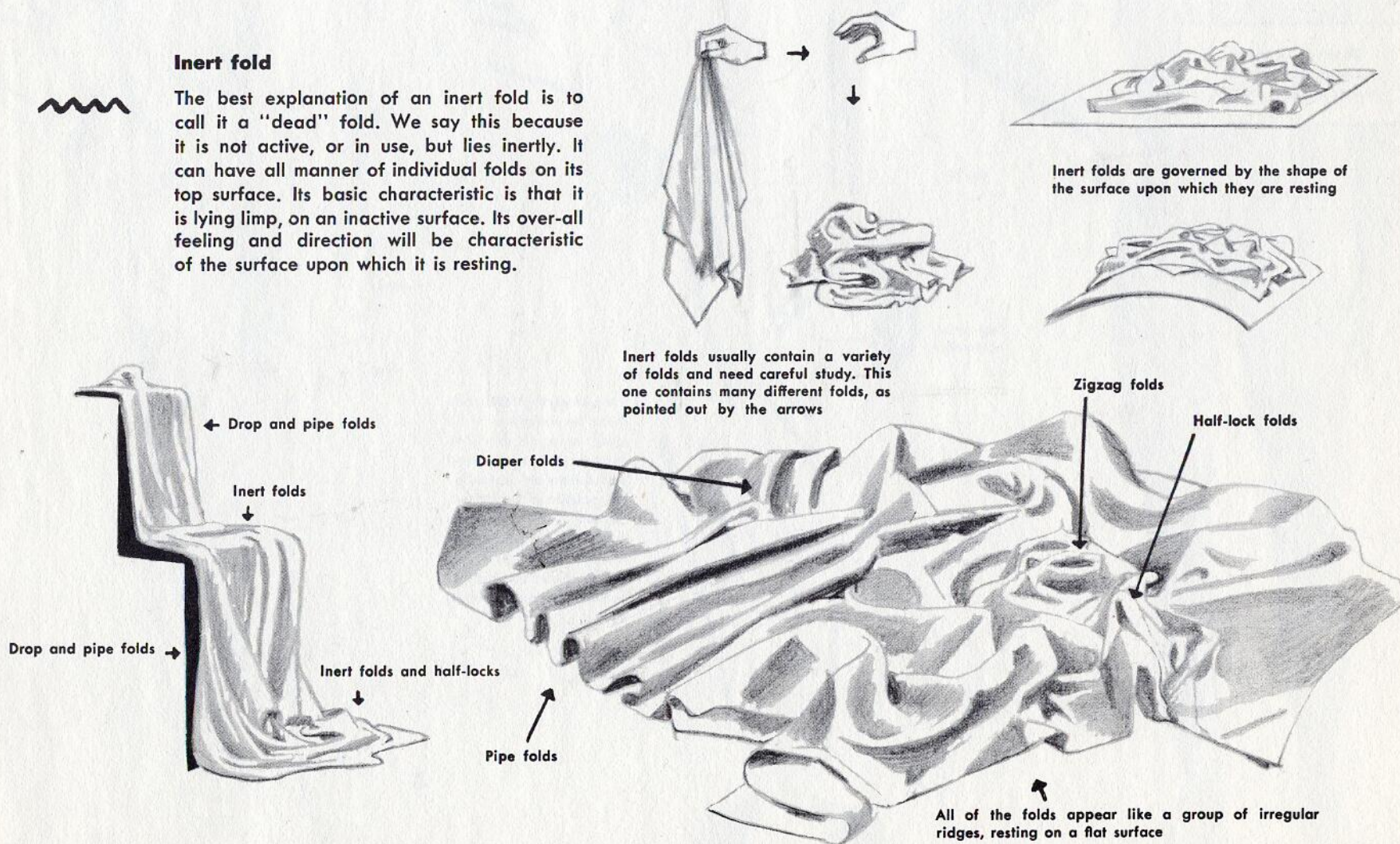
### Drop fold

From a point of suspension, the drop fold twists, turns and staggers. Sometimes it hangs straight, like a pipe fold. At other times, a curved edge will give it a spiral effect. The important characteristic is that *it is dropping* – regardless of small folds that occur during the process. Drop folds will contain small zig-zags, spiral, and half-locks – but they all contribute to the entire drop of the cloth.



### Inert fold

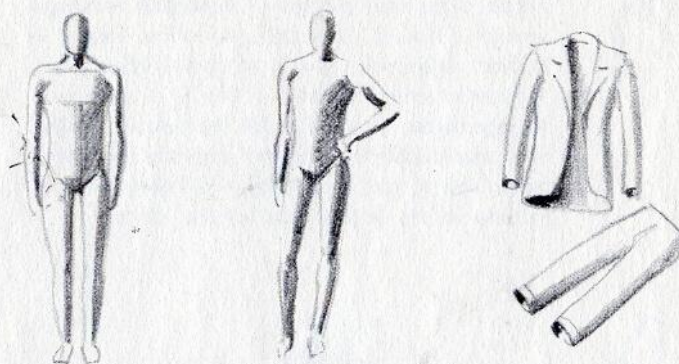
The best explanation of an inert fold is to call it a "dead" fold. We say this because it is not active, or in use, but lies inertly. It can have all manner of individual folds on its top surface. Its basic characteristic is that it is lying limp, on an inactive surface. Its over-all feeling and direction will be characteristic of the surface upon which it is resting.



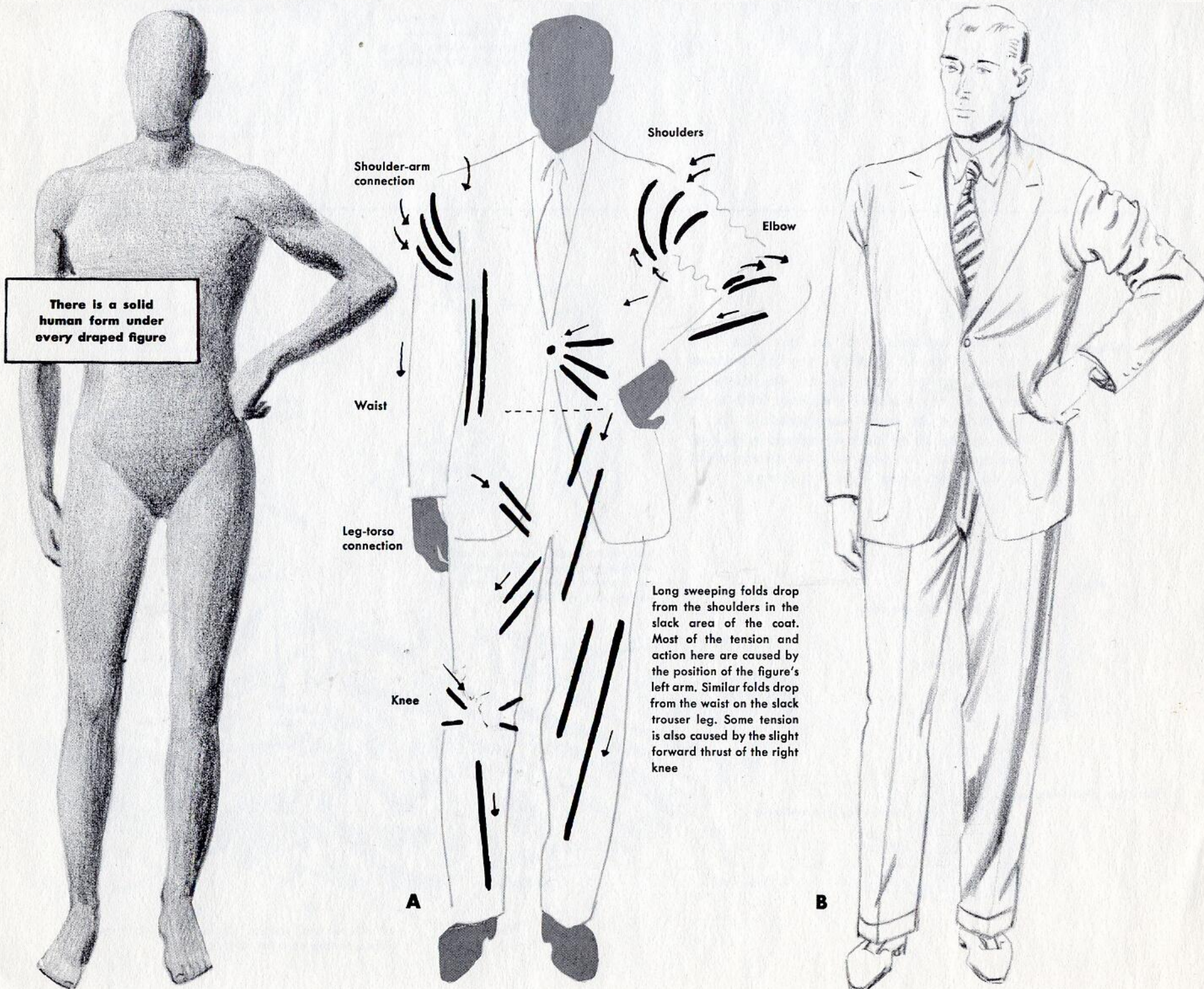


## Draping the male figure

The folds in a draped figure are controlled by three factors: 1- The shape of the underlying form, 2- The action of the figure, 3- The cut of the garment. The folds caused chiefly by the laws of gravity are supported at two places: the shoulders and the waist. These folds are of a long and flowing nature. The folds caused mainly by tension occur at various points and are condensed in character. The main points of these folds are: shoulder-arm connection, elbow, waist, leg-torso connection and the knee. A study of the general character of each group of folds is necessary to drape the figure well. A garment is cut to clothe a figure and at the same time allow for its necessary motion and action. A garment is not just a piece of cloth, it is a cylindrical shape that is confined and has definite limitations of volume. A sleeve, a coat or a skirt is shaped to cover a similar form, allowing excess cloth for free use of the underlying form. When an arm, torso or leg bends or changes direction, the cloth slackens on the opposite side of the tension. This cloth obviously does not change in amount; it just condenses. As it condenses, it creates folds that behave in definite ways in different places. The way they behave is determined by gravity, tension, support and action. The captions and arrows on these pages need careful study. They cover the basic causes and directions of garment folds.



The shape of the form — the action of the figure — the cut of the garment are controlling factors in draping the male figure





There are two basic points of support in draping the figure, the shoulders and the waist. All folds are controlled by these two points. On a standing, inactive figure the folds, influenced by gravity, drop with only slight irregularities caused by the changing contours of the body. In draping the male figure, the most important of these irregularities occur where the sleeve joins the shoulder and where the trousers meet the crotch

From the outside edge of the shoulder, and from the protruding edge of the chest, the folds are pulled downward by gravity

Although the trousers are supported at the waist, the wider point of the body at the hips becomes the actual point from which the folds fall downward

As the shoulders and hips change position by a shift of balance to one leg, the points of support also change position and create a different tension. The dark arrows show the direction of the flow of folds which descend from the highest point of support and strongest points of tension

Folds radiate from the protruding edge and follow the direction of the form

In a tight, enclosed garment, such as a skirt or trouser leg, the folds fall diagonally, following the contour of the form. Below the point of tension, and on the side of the point of support, a slack area occurs

Point of support  
Point of tension  
Slack area

Point of support  
Point of tension  
Slack area

The farthest protruding edge becomes the point of radiation of the folds, although it may not be the actual point of support

When the coat is buttoned, a group of tight condensed folds occurs at the shoulder-arm connection. They radiate in a curving direction from the shoulder to the point of tension at the button

The condensed folds that occur at the shoulder have pulled the free edge at the cuff of the sleeve inward toward the body

The leg slants diagonally from the hip. The outer side is the tension side, and the folds will take the direction shown by the arrows to the upper point of support at the waist. The inside edge drops away, influenced by gravity

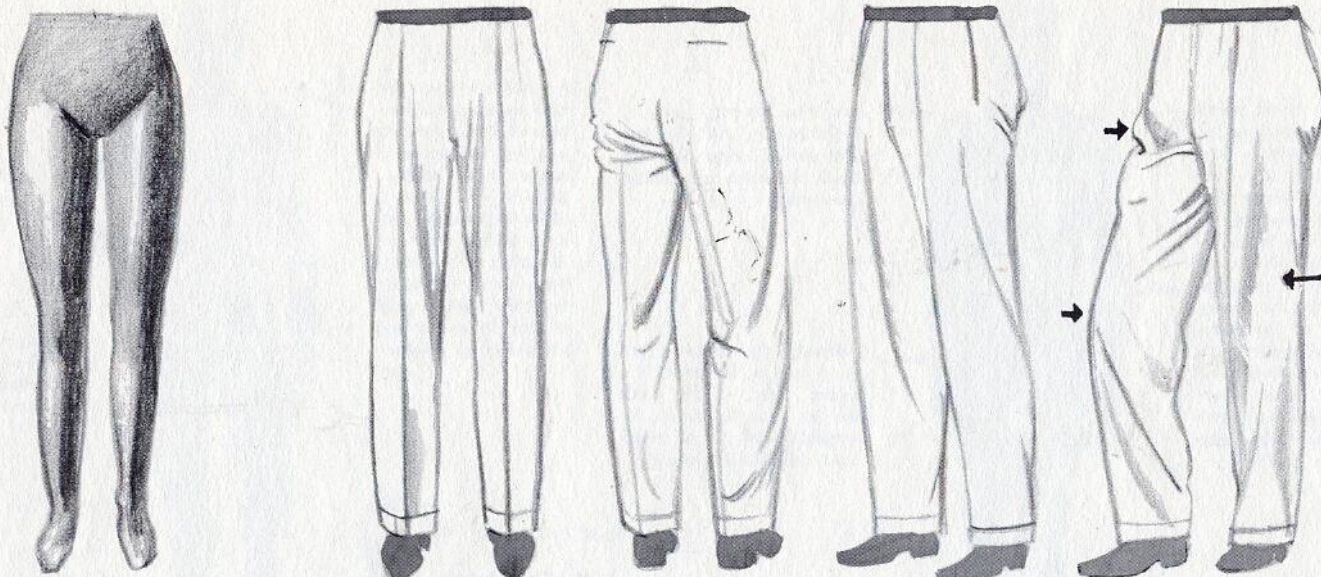
Folds bunch and condense on the slack side of a form opposite the tension edge

Study here how the direction of the folds follows the direction of the twist and action of the body

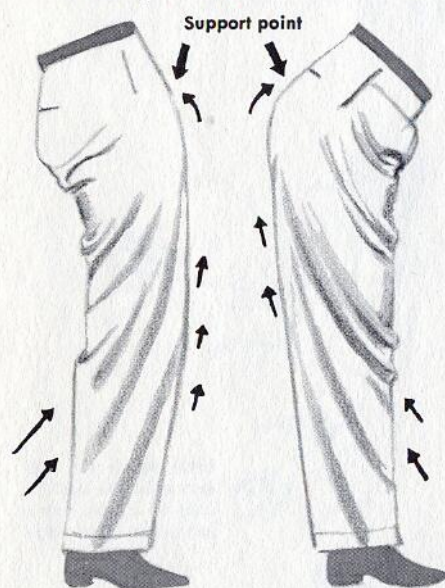


### The trouser

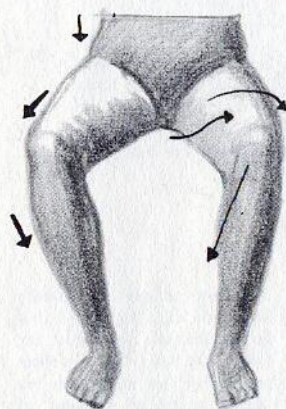
The high place of support is at the waist. The greater width of the hips affects the folds because they become a radiating point of support. You must **always** think of the form that the trousers are draping or you will have no success in drawing folds. The lower body is cylindrical. Trousers are made to cover the cylinders with sufficient slack to allow freedom of action. The drape of the cloth must go around the form, **and** also obey the laws of gravity, support, tension and function.



These diagrams show the folds pulling upward to the point of support. This causes long sweeping pipe and drop folds that reveal the figure action.

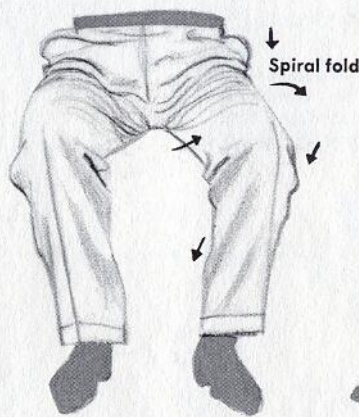


Trousers are supported at the waist, but "hang" from the hips and buttocks. The pressed seam drops straight down due to gravity. Other slight sweeping folds follow the contour of the limbs.



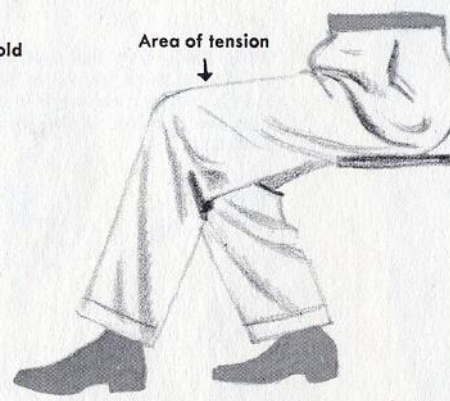
Trousers are cut to fit the leg from the waist down with allowance for freedom of motion.

The leg on the left is straight. The other is bent at the knee. The change of direction creates half-lock folds on the under or slack side of the bent leg. Where the leg on the left joins the torso, other tight, half-locks and pipe folds occur.



The spiral folds condense at the leg-torso connection and follow the direction and shape of the upper leg. Pipe folds occur from the knee down.

The leg on the right is bent slightly back. This causes a "pull" from the support point at the waist. A long, sweeping pipe fold descends to the calf. The tension causes small spiral folds at the buttocks.

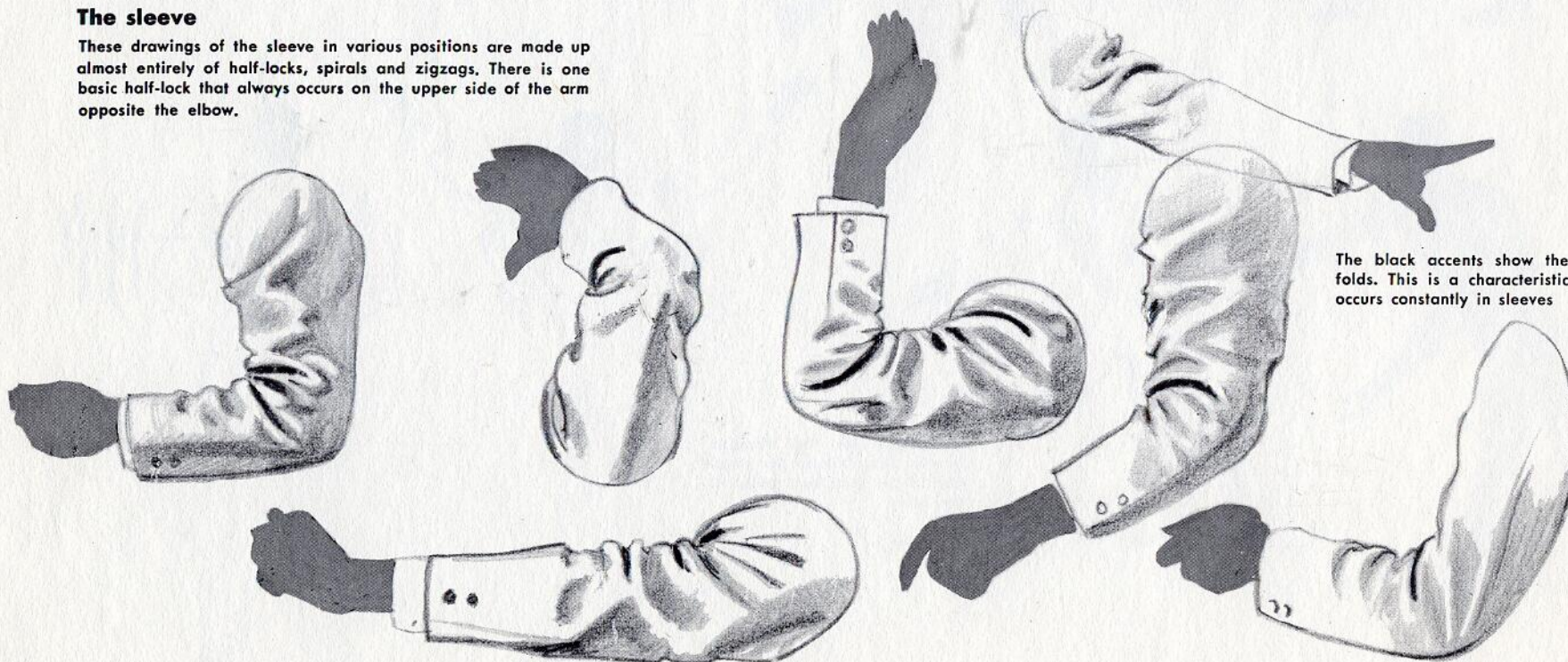


The trouser folds are pulled downward from the top side of the leg by gravity and tension. They can only descend as far as the volume of the garment will allow.

The three arrows point to the three important folds, the top ones forming as the leg starts forward, the lower ones starting where the knee changes direction, the other shows a long sweeping fold without tension.

### The sleeve

These drawings of the sleeve in various positions are made up almost entirely of half-locks, spirals and zigzags. There is one basic half-lock that always occurs on the upper side of the arm opposite the elbow.

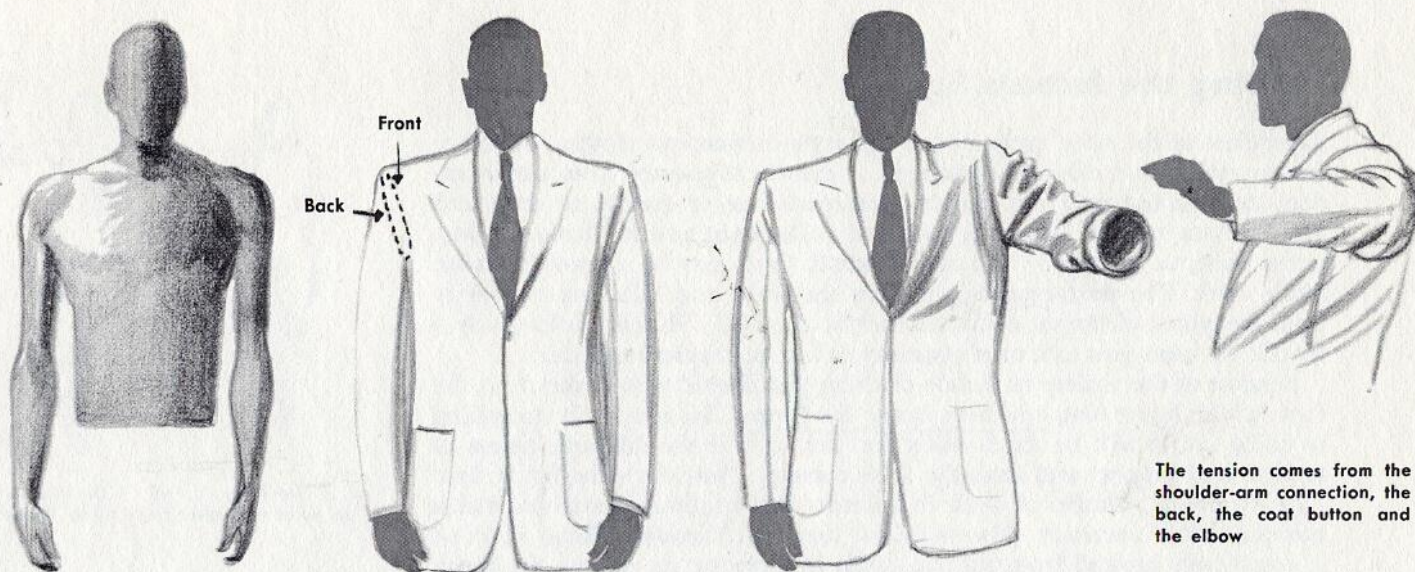


The black accents show the half-lock folds. This is a characteristic fold that occurs constantly in sleeves.



### The coat

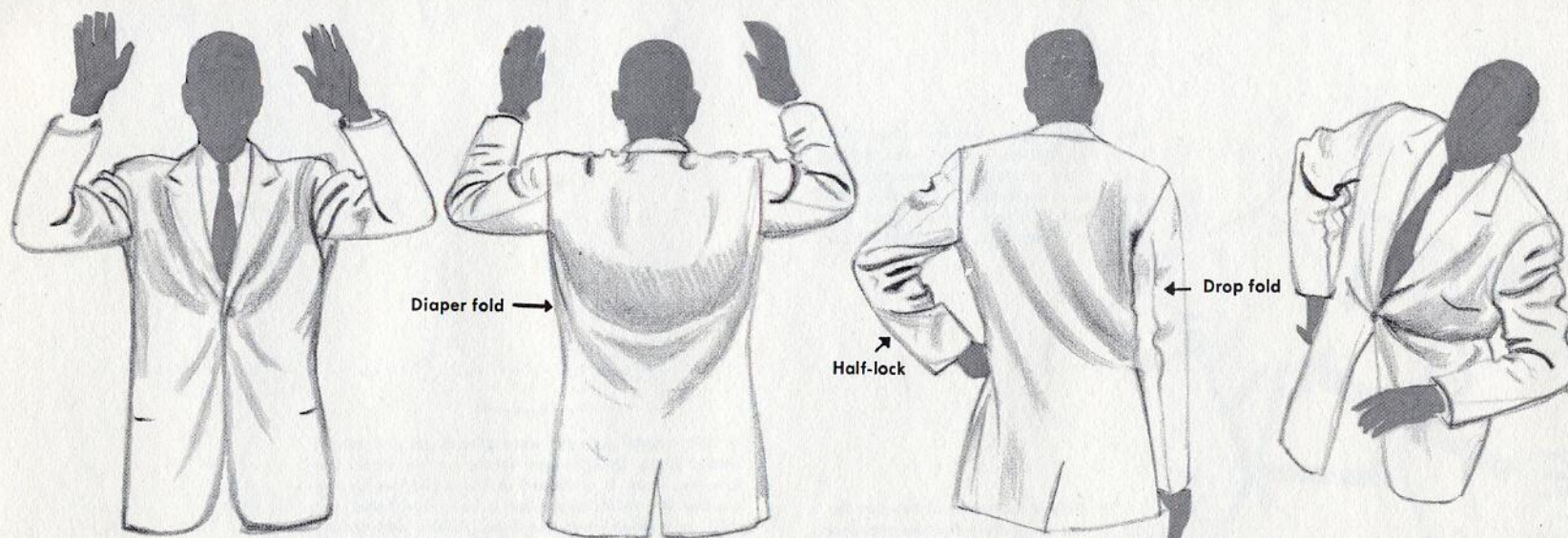
The coat or jacket is supported from the shoulders. Its range of folds is greater than the trousers, first, because of the increased action of the arms, second because it can be buttoned or unbuttoned and third because of the greater variety of garment design. The form and action of the torso and the arms must be understood to draw these folds correctly. The shoulders and arms create most of the folds because of their greater range of motion when compared to the limited range of the torso action.



The tension comes from the shoulder-arm connection, the back, the coat button and the elbow

The coat is supported from the shoulders and descends with few folds. The sleeve sets into the body of the coat on an angle where the arm and shoulder join

When the arm is lifted, a tension occurs on the cylindrical sleeve that condenses the folds at the armpit in spirals and half-locks

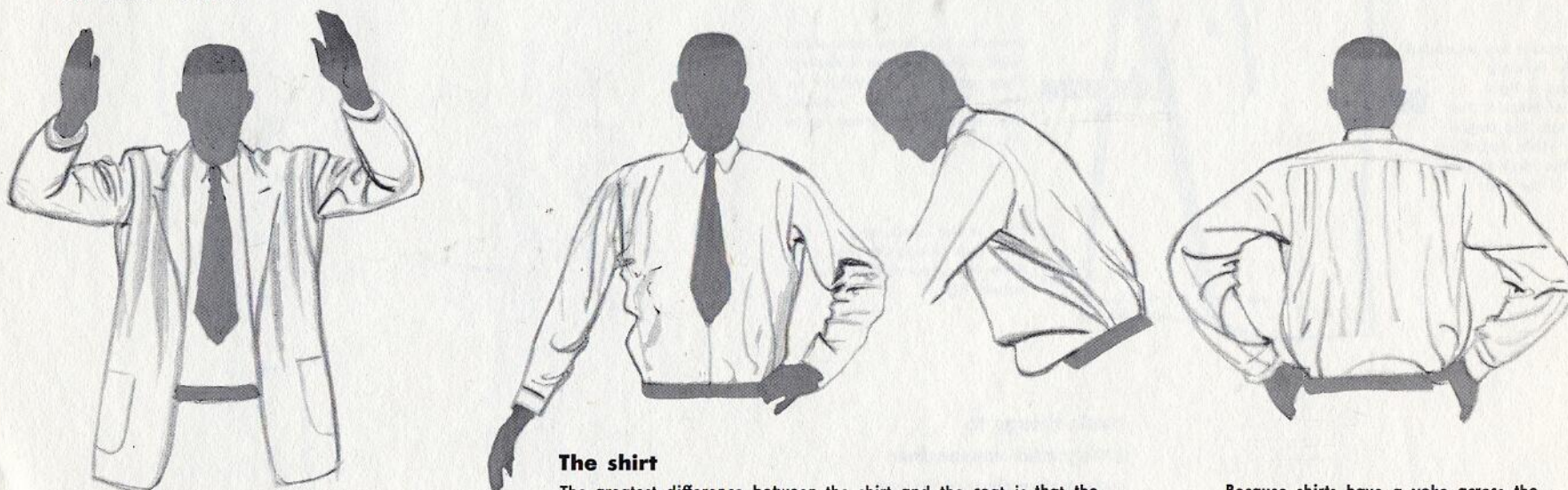


The arms raised in a buttoned coat cause folds to descend from the shoulders to the button and from the button outward toward the pockets. With arms raised, spiral folds radiate around the upper arm from the inside to the outside toward the elbow

The tightness of the sleeve fitting at the armpit causes the entire coat to raise upward when the arms are lifted. This creates a group of diaper folds which cross from the two supporting shoulder points

In this quartering view of the back, study the long sweep from the high shoulder, halfway down and across the back. This is a constantly recurring fold when an angular tension is created

Notice the very large half-lock fold that occurs at the waist button position on the coat. This occurs because the figure is bent sideways and there is a great deal of slackness in the garment



When the coat is not buttoned, the folds taper out toward the bottom in a free sweep from the shoulders

### The shirt

The greatest difference between the shirt and the coat is that the shirt is held rigid at the waist. The shirt is full and contains drop folds and pipe folds of great variety radiating from the waist to the shoulders. They vary in character in relation to the degree of tension present. A twist of the body will sometimes give them a tight spiral character, while a relaxed attitude, will create numerous diaper folds

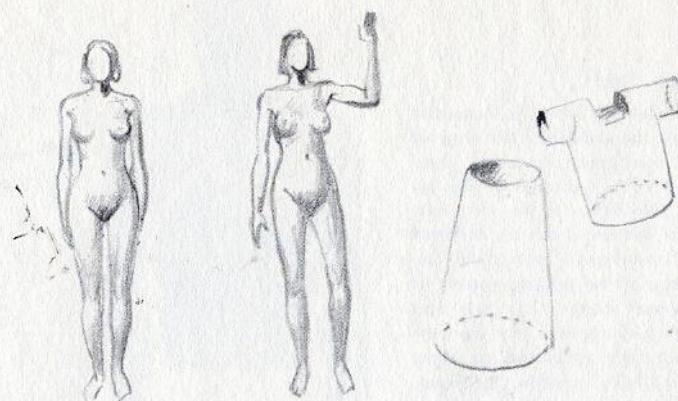
Because shirts have a yoke across the shoulders, folds descend from the yoke to the waist rather than from the top of the shoulders. These are pipe folds and drop folds. A change of tension caused by the lifting of the arms will change them to diaper folds



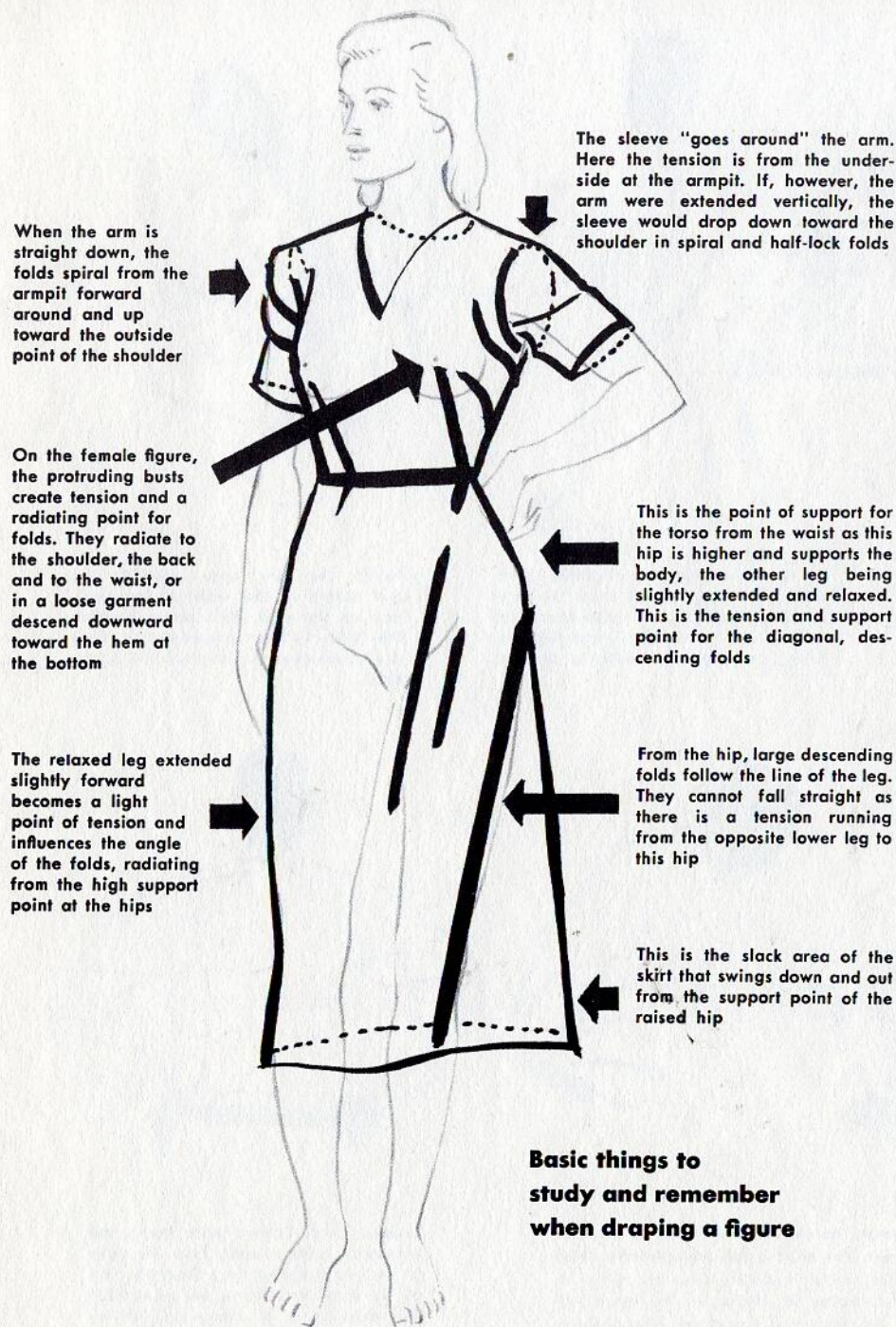
## Draping the female figure

Regardless of the wide range of cut and style in women's clothes, there are fundamentals that cannot be changed. A dress is supported from the shoulders, extends out over the bust and descends due to gravity in drop and pipe folds to its hem. It may be gathered at the waist and fall from the bust to the waist, to the hips — and then descend. Or it may be a separate blouse and a skirt. The skirt extends out from the waist and falls due to gravity from the point of largest circumference at the hips. This is traditionally a female costume, just as a man's costume is a coat, trousers and shirt.

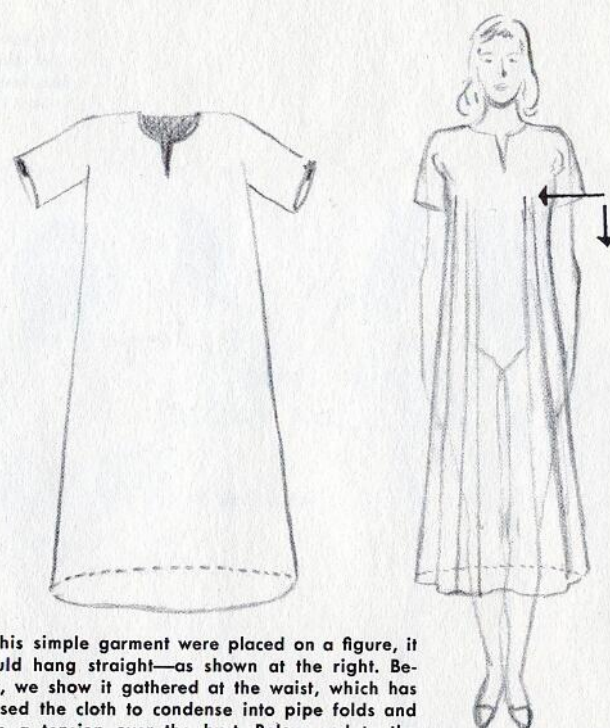
Because of the variety in female clothing you should always sketch in the form of the figure first, *and then drape the form*. This gives you something to build on. It will be much easier for you to find the different points of tension and support and have the folds correct if you draw the figure first. The variety of volumes of cloth in different cuts of female garments makes this procedure necessary. Always follow the fold "through." That is, draw it completely around from start to finish by drawing its volume, its depth and its contour. When you do this, the fold that is controlled by tension will follow the form. Those controlled by gravity will find the protruding edge and descend.



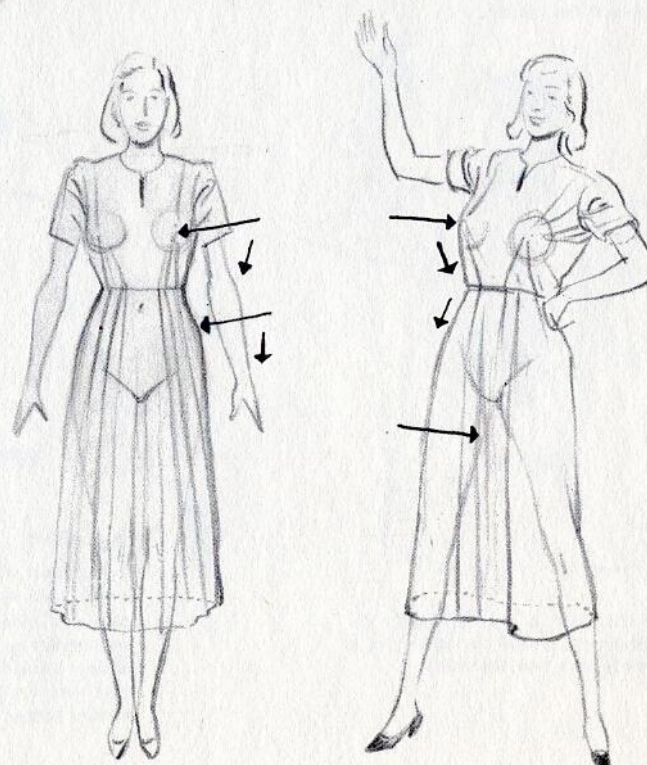
The Form — The Action — The Garment  
You must remember these three things to drape the figure correctly



**Basic things to study and remember when draping a figure**



If this simple garment were placed on a figure, it would hang straight—as shown at the right. Below, we show it gathered at the waist, which has caused the cloth to condense into pipe folds and puts a tension over the bust. Below and to the right, the figure has moved, with legs apart and the figure slightly bent back. In this stance the cloth drops from the bust over the stomach and falls between the legs. Study the outlined figure beneath and also follow the dotted line which shows the contour and volume of the bottom of the skirt



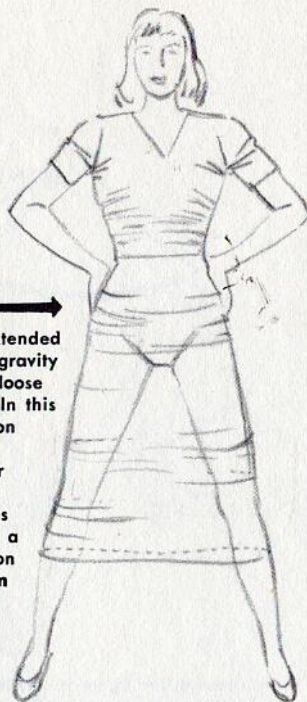




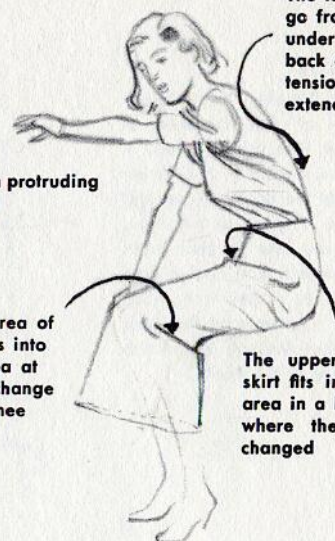
The two arrows indicate the two points of tension. Study the direction of the folds, from their fixed support points to the points of tension



Even with legs extended the folds fall by gravity as shown on the loose dress at the left. In this posture the tension points on a tight dress are stronger than the support points. This causes the folds to go in a horizontal direction around the form



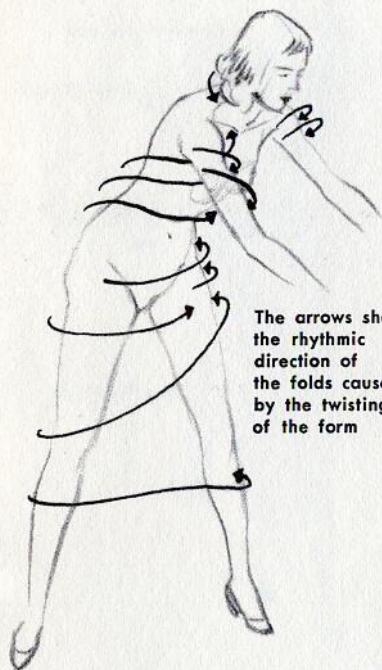
The tension is from protruding busts to the waist



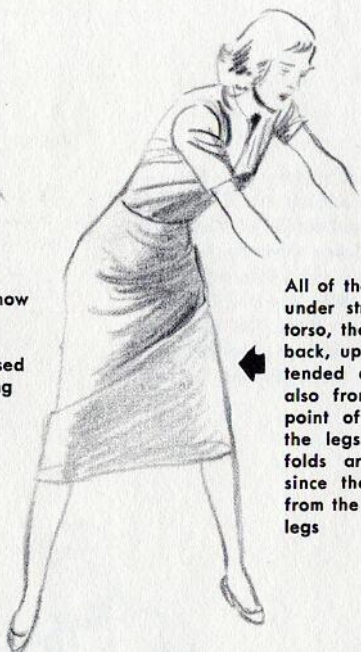
The large tight folds go from the shoulder, under the arm, to the back at the waist. The tension is against the extended arm

The middle area of the skirt locks into the lower area at the direction change behind the knee

The upper area of the skirt fits into the middle area in a large lock fold where the direction is changed

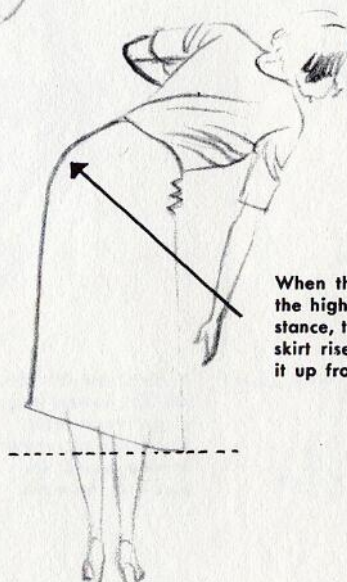
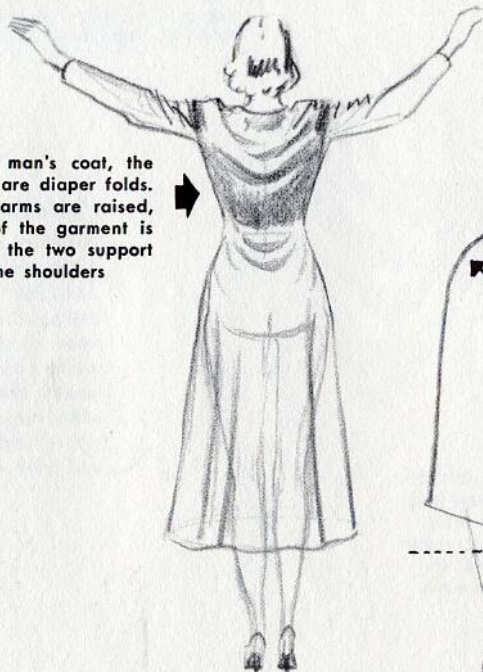


The arrows show the rhythmic direction of the folds caused by the twisting of the form



All of the tension points are under strain. On the upper torso, the folds go from the back, up and under the extended arms. The strain is also from the back to the point of the bust. Because the legs are extended the folds are more horizontal since the strong tension is from the outside edge of the legs

As in the man's coat, the back folds are diaper folds. When the arms are raised, the slack of the garment is created by the two support points at the shoulders



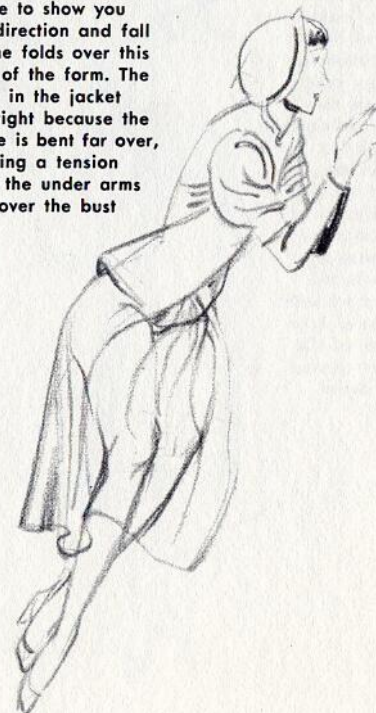
When this becomes the high point in a stance, this side of the skirt rises, which lifts it up from the floor

### The suit

In the jacket, the folds are similar to those in a man's coat, with the exception of the extended bust. In figure 1, notice that the folds on the upper arms are "soft" folds without much strain, showing a generous amount of cloth from elbow to shoulder. The skirts on all three figures are creating long folds from hip to knee. The weight in each case is on the right leg, with the left knee extended. You will see that this makes a slight difference in the edge of the folds because each skirt is cut slightly different. In figure 3, the side view shows a long fold coming from the waist, following the contour of the leg. This is caused by tension created at the waist as the figure bends slightly back.



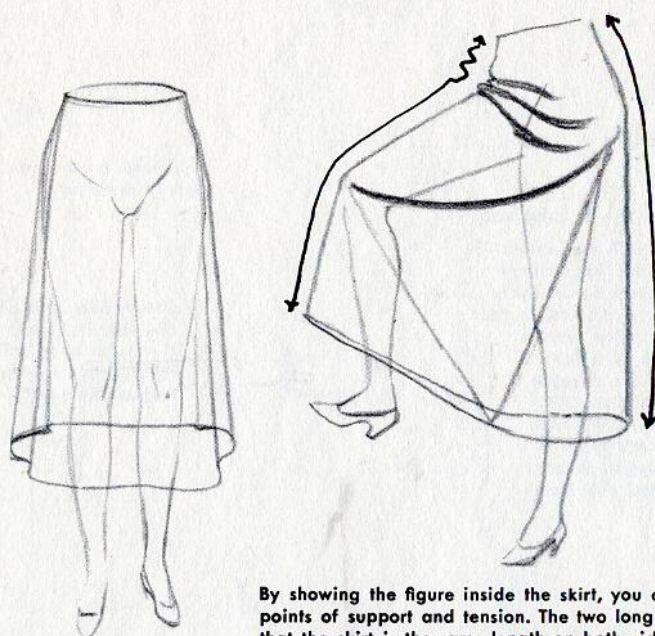
We have drawn in the lower part of the figure to show you the direction and fall of the folds over this part of the form. The folds in the jacket are tight because the figure is bent far over, creating a tension from the under arms and over the bust





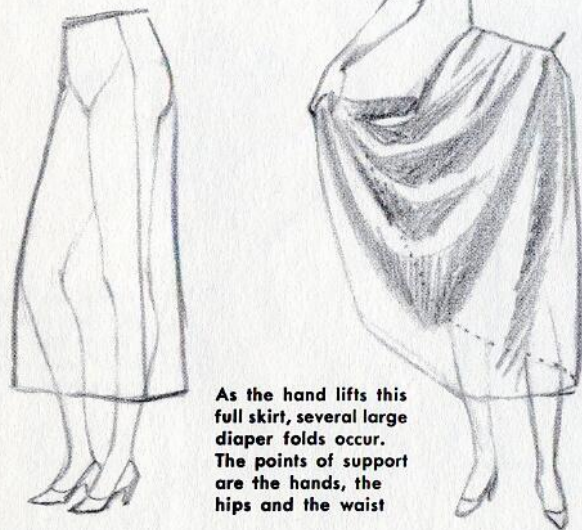
### The skirt

Basically, the skirt is a cylindrical piece of cloth, narrower at the waist than at the hem. It must accommodate the lower portion of the figure. If you will study the diagram at the right, you will see how the form looks below the skirt. You must always be conscious of this underlying form, as it governs all the folds of the skirt through the action and stance of the figure.



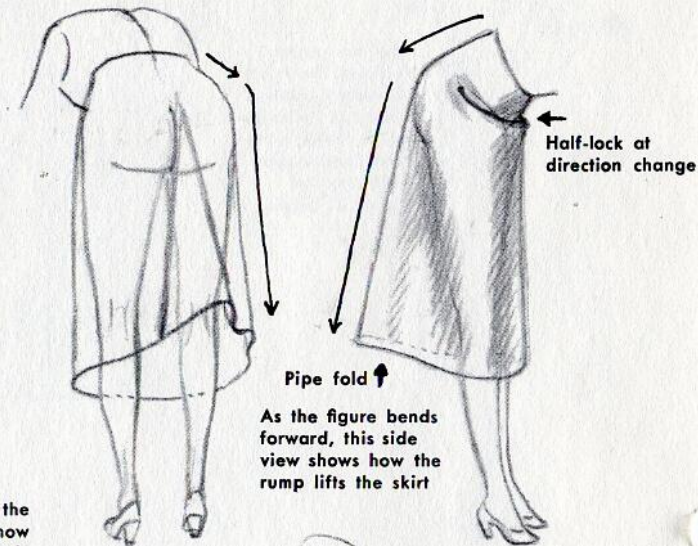
By showing the figure inside the skirt, you can study the points of support and tension. The two long arrows show that the skirt is the same length on both sides. The basic points of tension here are at the knee of the extended leg and the hip. This creates a long, sweeping diaper fold from knee to hip in the slack area of the skirt.

By studying the underlying figure you can see how these protruding edges affect the folds.



As the hand lifts this full skirt, several large diaper folds occur. The points of support are the hands, the hips and the waist.

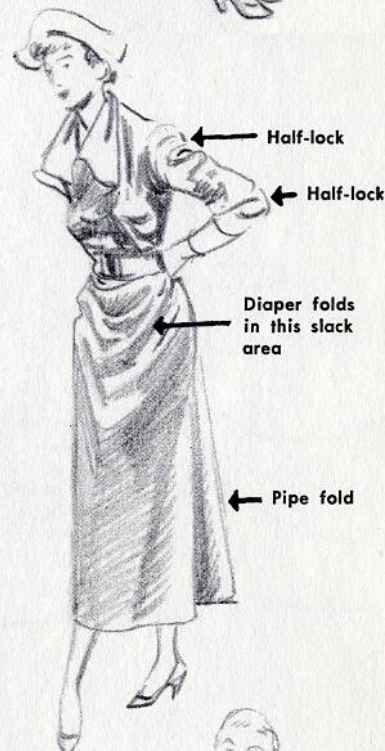
As the figure leans over, the skirt lies flat on the rump for a short distance before it descends. This forward extension of the torso has caused the skirt to raise in the back. Usually one or two large pipe folds drop from the protruding edges at the buttocks.



Pipe fold  
As the figure bends forward, this side view shows how the rump lifts the skirt

### The dress

Our chief concern is in the basic pattern of a dress — that is, those with tight or loose bodices and full or tight skirts. Most dresses fall into a combination of these basic designs. Different types of folds occur when the bodice is loose, as compared to one that is tight. This change demands careful study, as it will show how the degree of tension affects the character of the folds. This applies to either the skirt or the bodice. Below we show the basic types. Study the differences in folds between the tight and loose garments.



Half-lock  
Half-lock  
Diaper folds in this slack area  
Pipe fold

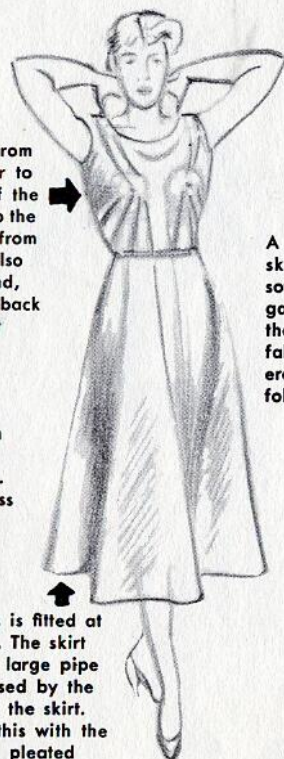
This shows a fitted dress with a reasonably full skirt. By cutting the garment to fit the bodice, points of tension are reduced to a minimum. From the point at the waist the dress fits out over the hips and the looseness of the skirt from there to the hem causes most of the folds in this type of garment, with the exception of those occurring around the arm-shoulder connection at the sleeve.



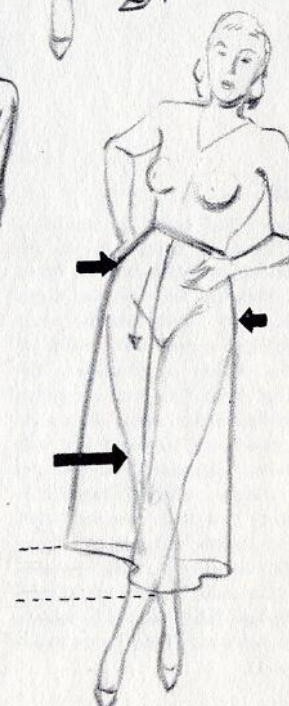
Pipe folds from the shoulder to the point of the bust down to the waist, and from this point also down around, toward the back at the waist.

The tight dress shows the many points of tension quickly because it hugs the form. This causes endless small folds radiating from the tension points.

The dress is fitted at the waist. The skirt has four, large pipe folds caused by the design of the skirt. Contrast this with the gathered, pleated skirt on the figure at the right.



A very full skirt made of soft material gathered at the waist will fall into numerous pipe folds.



The stance of a figure changes the behavior of the folds. If the hips are on an angle, the high hip will pull that side of the skirt up. If the skirt is tight, diagonal folds will occur from the high hip toward the outer leg. In a full skirt, as pictured above, there is little tension because of the fullness, and the folds fall directly down.



## Cloth in action

Folds are governed first by the laws of gravity

Gravity causes these folds to hang vertically

The pull of gravity is down

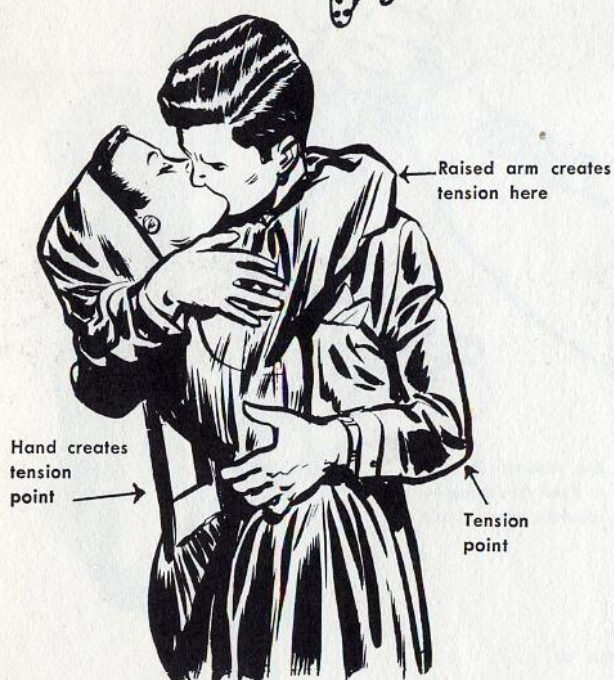


Heavy flight pants are apt to look more dented than wrinkled

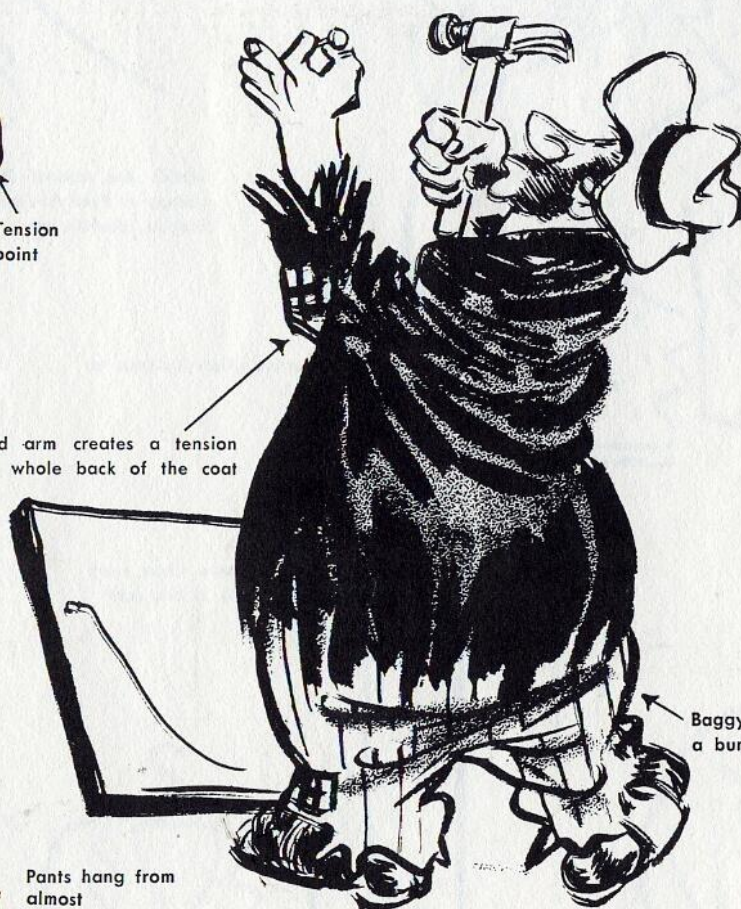


Simple blacks of the hat and cloak make this character stand out. He was designed to be outlandish — and he is

Look at and study the work of professional cartoonists

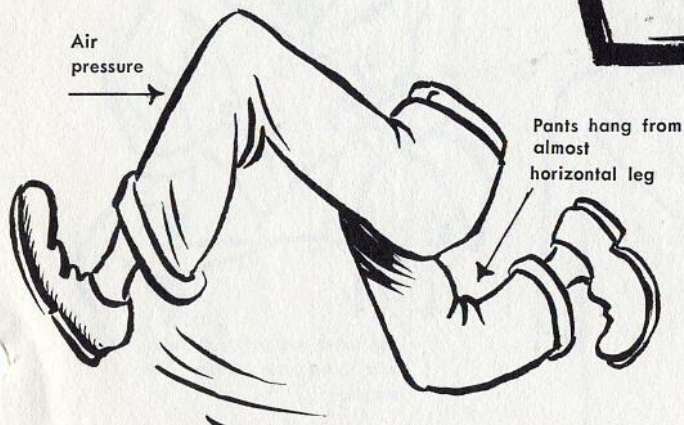


Here the raised arm creates a tension which pulls the whole back of the coat

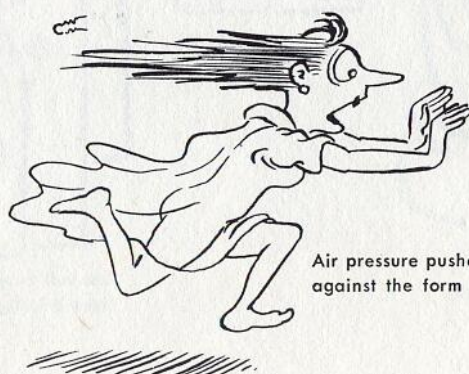


Hand in pocket lifts bottom edge of coat making folds

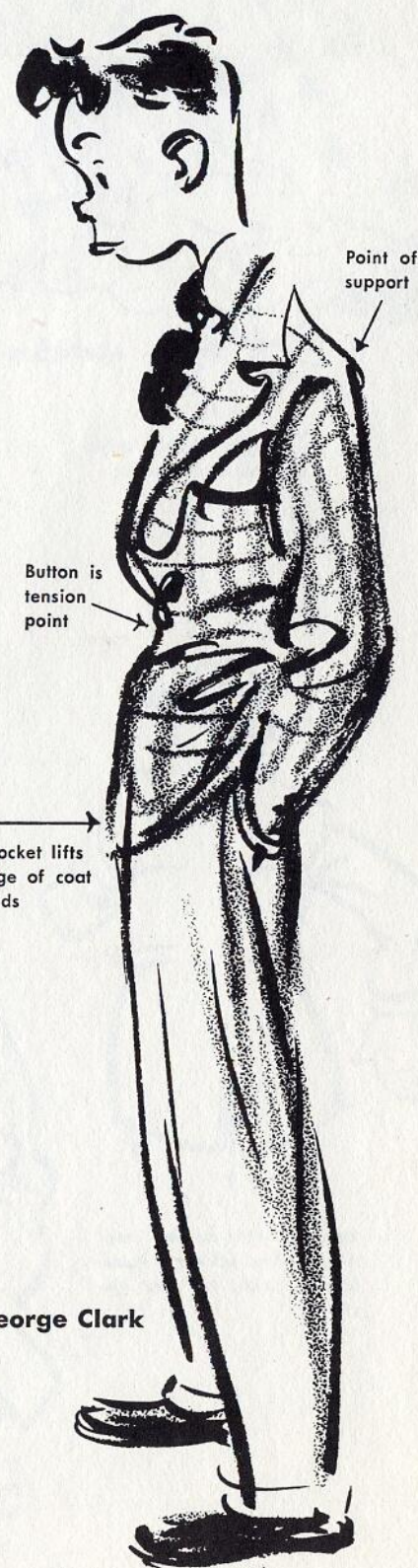
Baggy pants create a bunch of folds



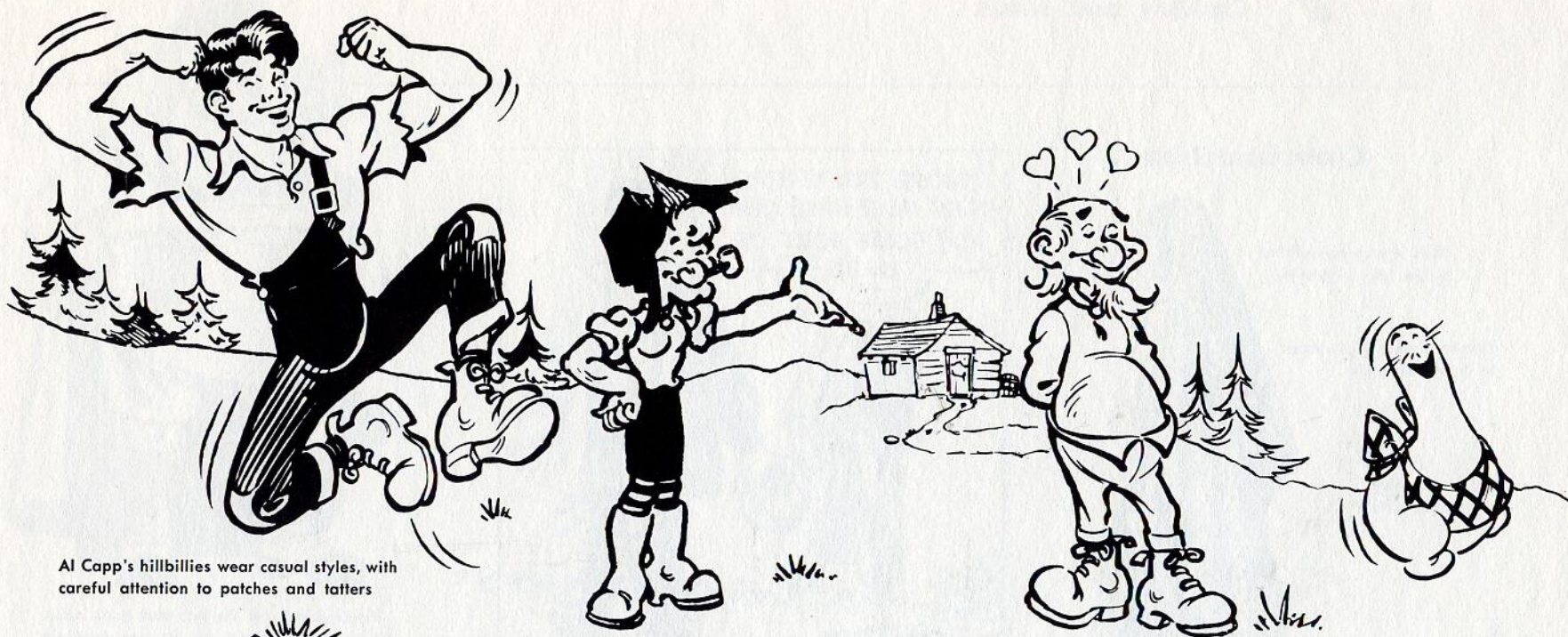
When a man is running his trouser leg is pushed back against the leg by air pressure



George Clark



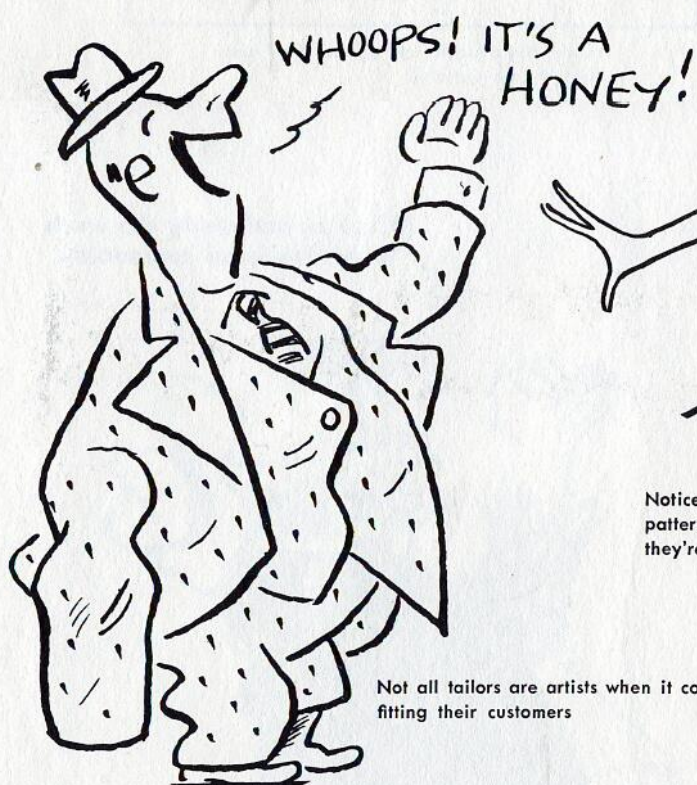




Al Capp's hillbillies wear casual styles, with careful attention to patches and tatters



Outline of cloth shows what is underneath



Not all tailors are artists when it comes to fitting their customers



Notice the natural fit and pattern of Penny's clothes — they're carefully worked out



Bursting with muscles and energy, this athlete creates tension points all over his clothes



This mental athlete's coat is by Omar the Tentmaker, via Rube Goldberg



Pants are three tubes sewn together — so is the coat

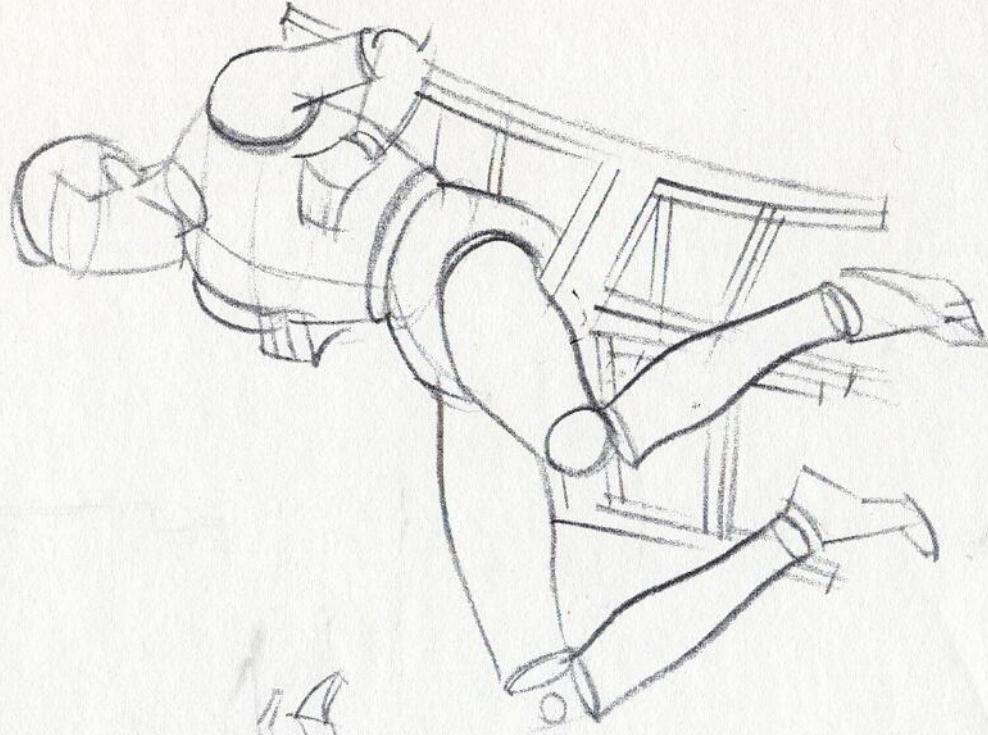


The suit hangs straight down from a hanger



The same suit takes its folds and character from the wearer







FAMOUS ARTISTS CARTOON COURSE  
Student Work  
Lesson 9

To study and practice

When it comes to drawing simplified clothes and folds there is no substitute for knowledge of the real thing. This lesson, therefore, presents the subject in rather complete, realistic detail. Before considering yourself qualified to simplify the wrinkles on cartoon characters, you should spend plenty of time on this lesson.

For practice, make simplified tracing-paper overlays of photographs of men and women in magazines, working out the most important folds in their clothing. Study these folds carefully, noting especially the points of support, pull of gravity and effects of tension. Sketch your friends' and relatives' clothing -- and your own. Look through your course to see how professionals simplify the basic actions of cloth.

Your grade on these assignments will depend on how well you understand and draw cloth in action. The figures on the page marked Plate 1 and the actions in Assignment 2 were carefully chosen to let us see what you have learned in the lesson.

The assignments you are to mail to the School for criticism

ASSIGNMENT 1

Draw the following prescribed clothes directly over the figures on Plate 1.

Man Bowling -- Slacks, shirt with sleeves buttoned at the wrist, no tie

Girl Running -- Full skirt, blouse, apron

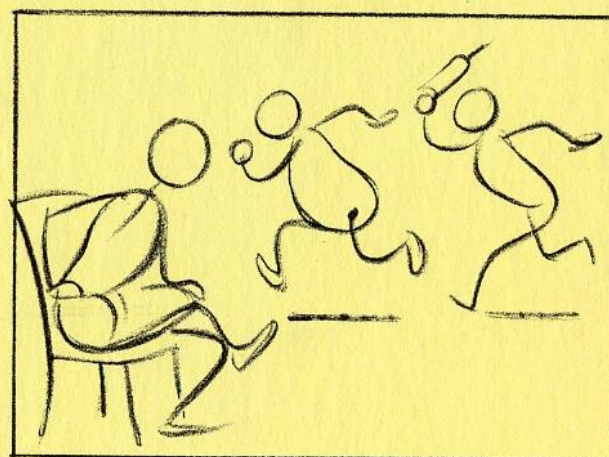
Man Seated -- Shirt with four-in-hand tie, business suit with vest, coat open, thumbs hooked under vest, hat tipped back on head

Before executing this plate, work out the folds in the clothing on tracing-paper overlays. Draw the folds on the plate itself with ink lines, using pen or brush. Keep the folds simple and do not put any shading in the drawing.

IMPORTANT - Mark this sheet ASSIGNMENT 1.

ASSIGNMENT 2

On a piece of 11 x 14-inch Bristol board, rule and ink a panel 7 inches high and 10 inches wide. Draw a cartoon of the following incident: A young man dressed in a business suit is seated in the faded parlor of a small-town boarding house. He is startled to see the owner of the boarding house, wearing work pants and a shirt without a tie, run through the room closely pursued by his wife. She is wearing slippers and a housecoat. Do this in pen and ink. Use either comic or realistic adventure style. You may follow the layout of this accompanying sketch or dream up your own composition, as you wish.



IMPORTANT - Mark this sheet ASSIGNMENT 2.

Present your assignments in the same clean, professional manner you would use if you were submitting them to the cartoon buyer of a publication. Letter your name, address and student number in the lower left-hand corner of each drawing. In the lower right corner, place the Lesson Number and Assignment Number. Mail to:

FAMOUS ARTISTS CARTOON COURSE  
Westport, Connecticut



**Famous Artists Cartoon Course**

**Westport, Connecticut**

**Special types**

Lesson



Rube Goldberg

Milton Caniff

Al Capp

Harry Haenigsen

Willard Mullin

Gurney Williams

Dick Cavalli

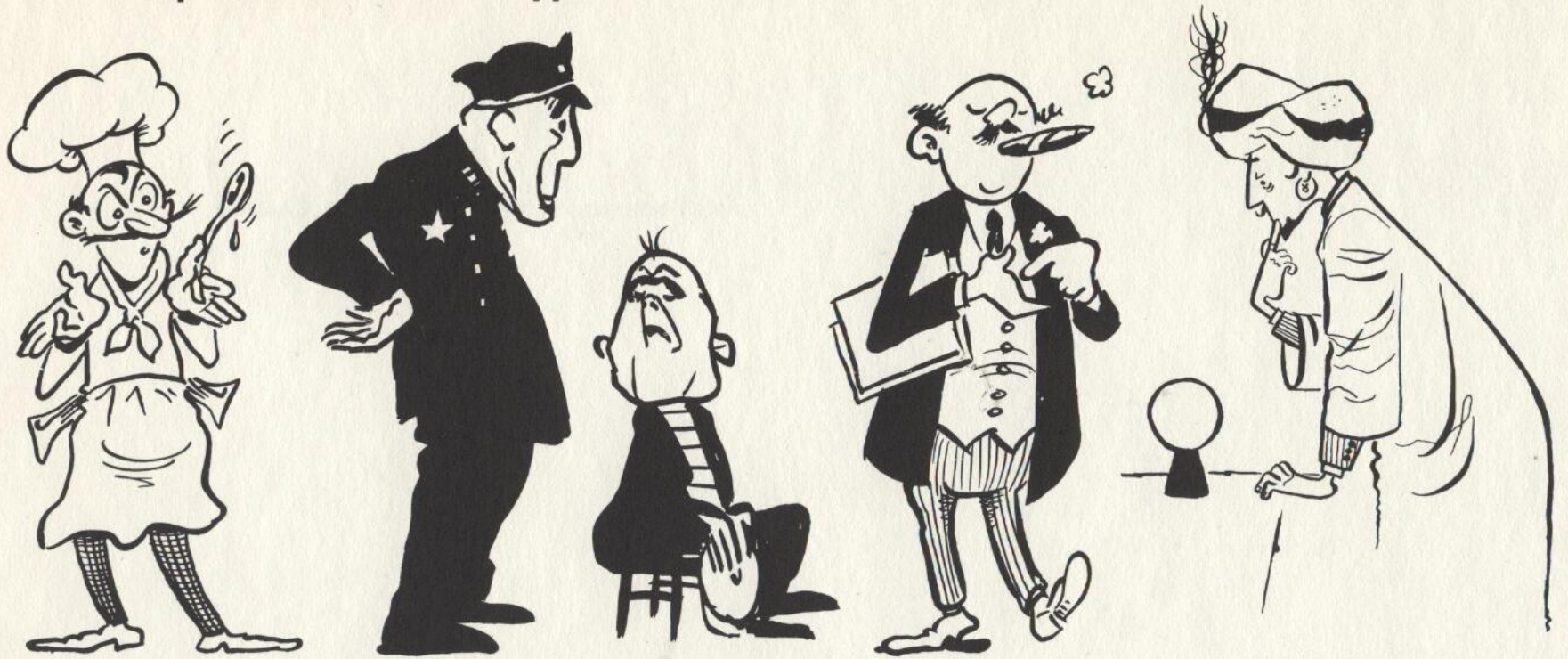
Whitney Darrow, Jr.

Virgil Partch

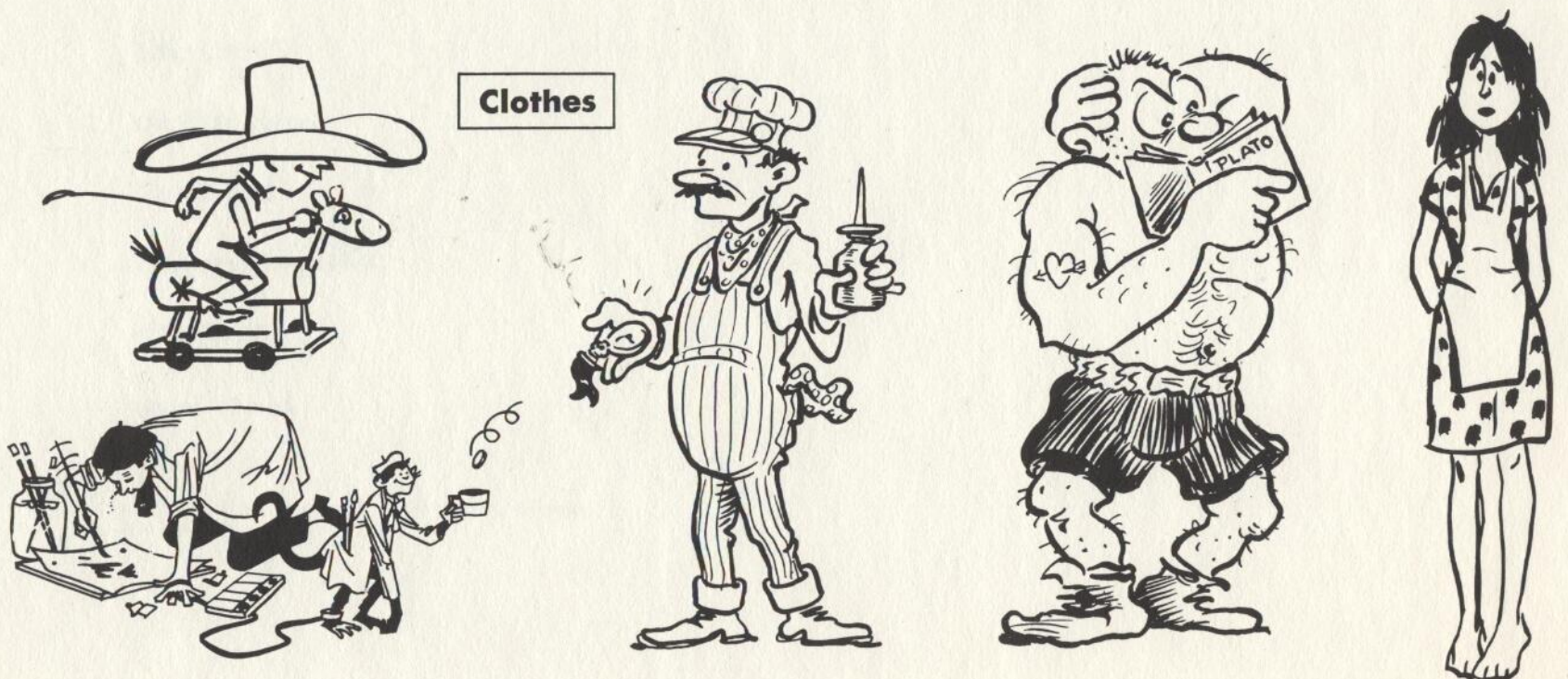
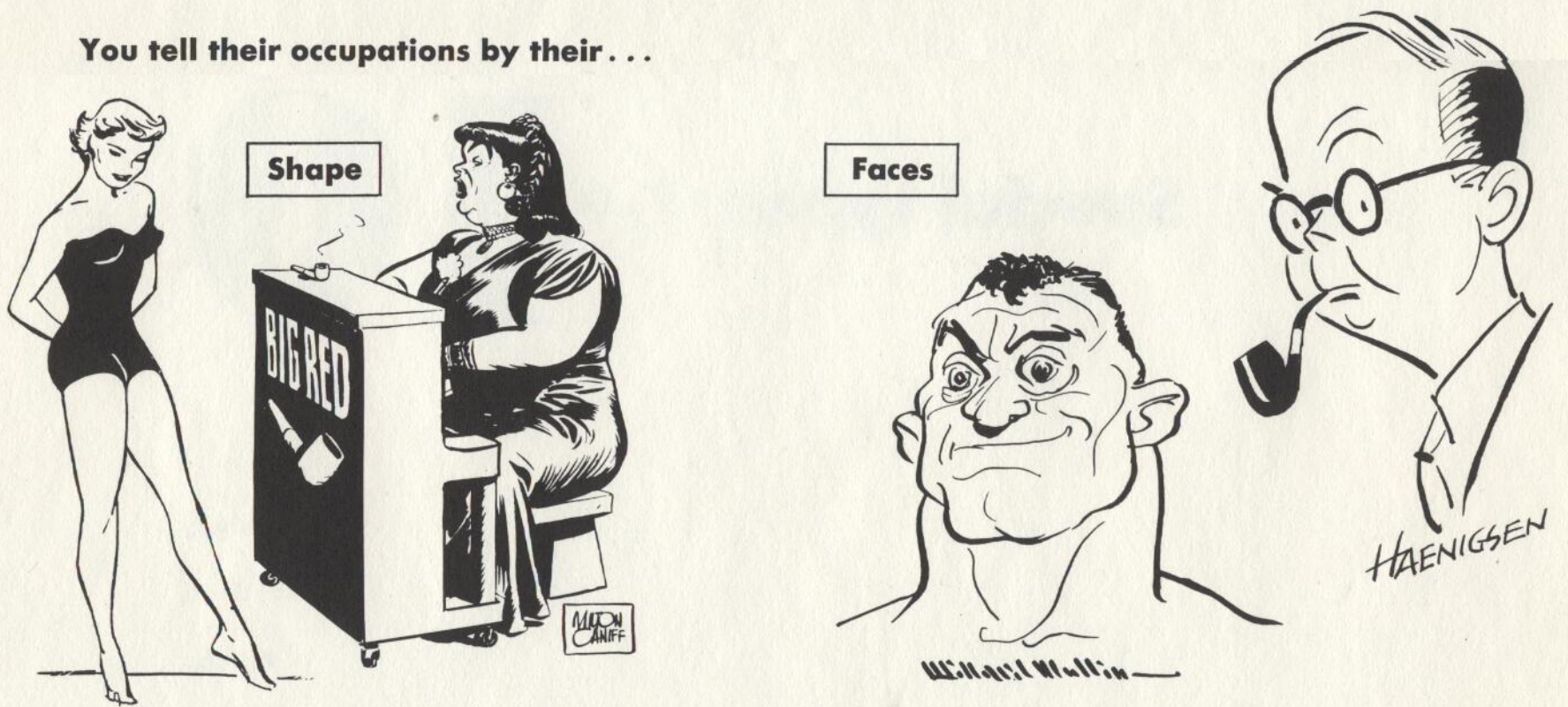
Barney Tobey



Occupations tend to make types



You tell their occupations by their...







## Special types

Casting the actors for your cartoon productions is a very important part of your work. As a cartoonist, you not only must pick the right character for the right role — you also have to be able to draw him. Your readers have come to expect certain types of characters in set roles. In this section we have tried to show you how to design a few stock characters and how they are expected to act.

Cartoon characters, although they are nothing but ink, are apt to cause just as much trouble as real people if they are mis-cast. They have their own personalities, which grow in the stories and in the minds of their creators. They can turn out unable to do the things you intended them to do and wreck a plot. Then again, they can become so important and alive that their personality almost writes your story for you.

This unexpected development of personality by cartoon characters is sometimes a gold mine to the cartoonist, providing he is on his toes and knows how to take advantage of it. Some years ago the Brooklyn ball club was, as far as the National League went, at the bottom of the barrel. When they started winning games it was not only amazing, but highly amusing to Willard Mullin. He had been drawing the Brooklyn team into his daily panel as a clown. The clown was getting by, but didn't have enough bite to him. It then occurred to Mr. Mullin that the guy at the bottom of the barrel is — a *bum*. He switched overnight and drew the first bum, not as a bitter down and outer, but as a happy-go-lucky tramp who was both surprised and belligerent about his triumphs. This ragged but cocksure character was an immediate hit. The whole nation started referring affectionately to the Brooklyn club as "Dem Bums." Even the Brooklyn readers liked him, which speaks well of Willard Mullin's ability at handling characters.

Luckily for cartoonists, the world is full of characters. We are all characters, whether we admit it or not, and we are all differ-

ent. Every man on your faculty agrees that, no matter what style you choose, the people you draw must be *believable*. Nine times out of ten, your reader laughs because one of your characters looks or acts just like someone he knows in his neighborhood.

Right now, however, we are more concerned with the outside appearance of our characters — what they wear and how their occupations affect their over-all appearance. For instance, in the mind of your reader, truck drivers should be big and tough, a gardener should be old and bent, while a bookkeeper should be thin, meek, and peer through glasses. Clothes, too, should be in character — the truck driver seldom appears in a business suit, and the bookkeeper doesn't show up at the office in a leather jacket and peaked cap.

In characterization, too, there are exceptions to the rules. Some of the most successful cartoon characters have been built up and succeeded because, perversely, they don't look the part. This reverse twist, the entrance of the unexpected, is an integral part of humor. Having a Casper Milquetoast type drive a truck is perfectly all right — if he is one of your main characters and you have plenty of time to develop and put over the idea of his personality. But, for a one-shot character, who is appearing only briefly in a minor role, it is much better to stick to the accepted form.

If you expect to make cartooning your business, you must study people, what they do and why they do it. When dentists meet people they automatically look at their teeth; when oculists meet people they are attracted to their eyes. When you meet people, you should make it a habit to observe everything about them — their special weaknesses and peculiarities — so you can record them in your cartoons. We have given you in this lesson only a few of the thousands of types of occupations. Study them and build up that morgue of yours with clippings of occupations and the people who work at them.



## Creating a character

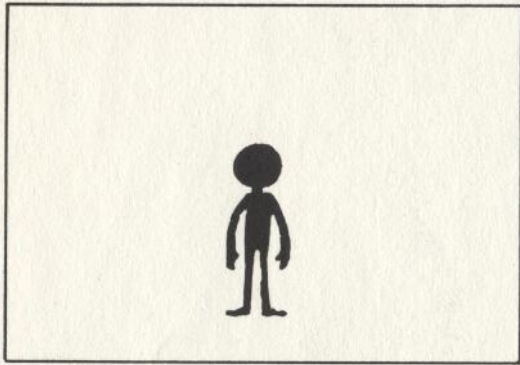
As casting director (as well as stage and property manager, director and producer of your cartoon opus) you have the job of picking proper characters and seeing that they dress correctly for their parts. Here's an example — let's say you're doing a cartoon feature and your story calls for a truck driver.

Each occupation has a psychological effect upon the person connected with it. This, in turn, has an effect upon his physical

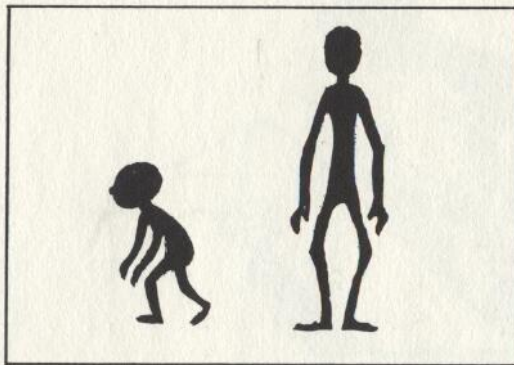
appearance and facial expression. Let's *think* about our truck driver. His is not an easy job. He has to fight for his rights. He lives in a physical world. He spends his time doing, not thinking.

So, first, you review everything you know about truck drivers and dig into your morgue if research is necessary. You want his shape, face and clothes to be *right*. Armed with knowledge, you are ready to cast the character.

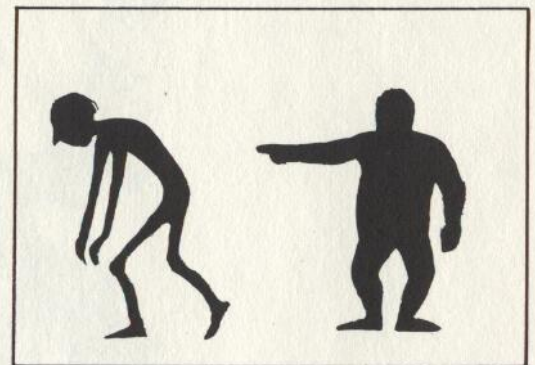
## Shapes



Here's Number One — right away we know he is too small for the part. Great for a librarian or a tea-taster, but he's too small to wheel a truck around



Here is Number Two — Wow! He couldn't fit into a truck — too tall. We'll save him until we need a basketball player



Now for Number Three — Hm! This is better. Large and strong enough to argue with stevedores. Your reader will believe he is a truck driver

## Faces

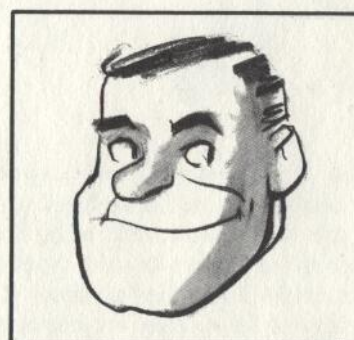
There is an infinity of feature combinations to make up a face. Which is right for a truck driver?



Now, this face would be swell for a druggist, but it is much too mild for our truck driver



This face is too old. All right for a southern colonel or a scientist, but he never drove a truck



This is what we want — an alert, strong face. He is no sissy. Our readers will believe in him as a truck driver

## Clothes



Our boy is no Ph.D. That gown would snag the gear shift



Hmm, overalls. They are work clothes, but better for a farmer



Let's try this on him. Leave the collar open — it's hot in a truck. Now, he's dressed for the part



This looks like it — cap, plain work shirt and work pants. Roll the sleeves for freedom of action

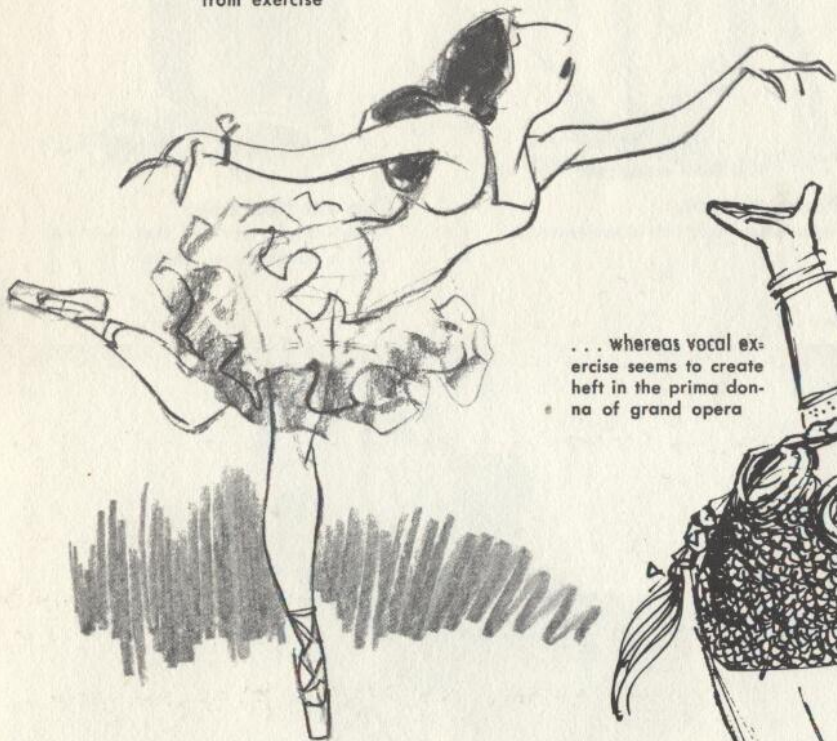


## Occupation

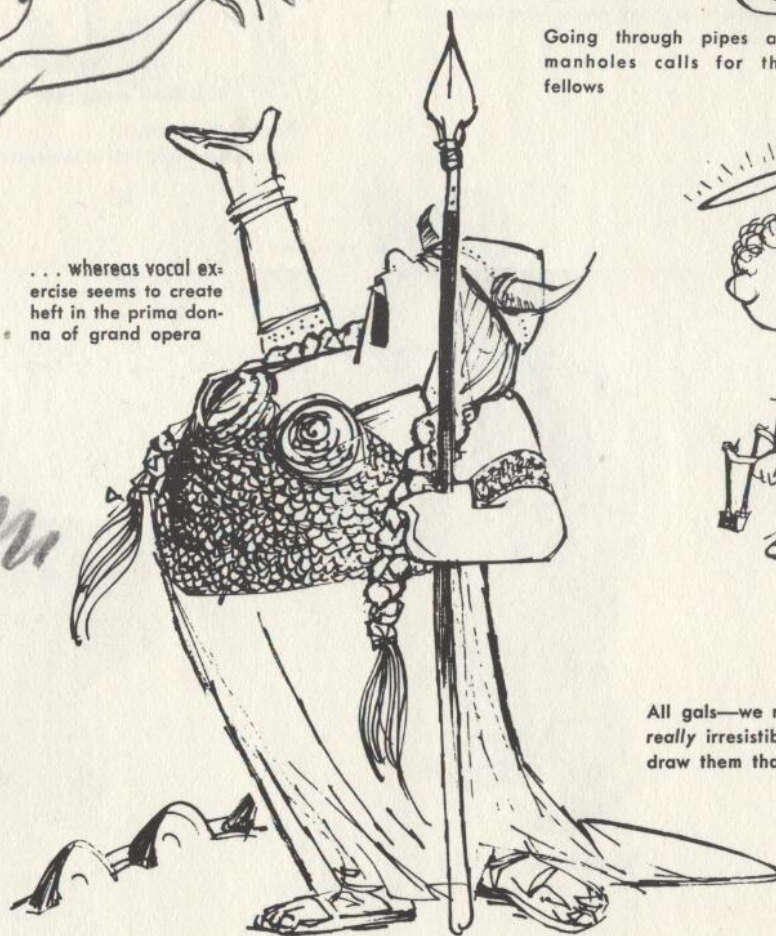
Occupation will often determine a character's size and shape, as well as his clothes and personality. A prizefighter is aggressive and a librarian is meek. The psychological effect of occupation is very strong. Take a good look at and listen to your friends — see how their jobs affect their everyday living.

Both the cleaning lady and Miss America are females, but their occupations call for slightly different shapes. When creating a character, remember that your reader has pretty fixed ideas of what people in certain occupations dress and look like.

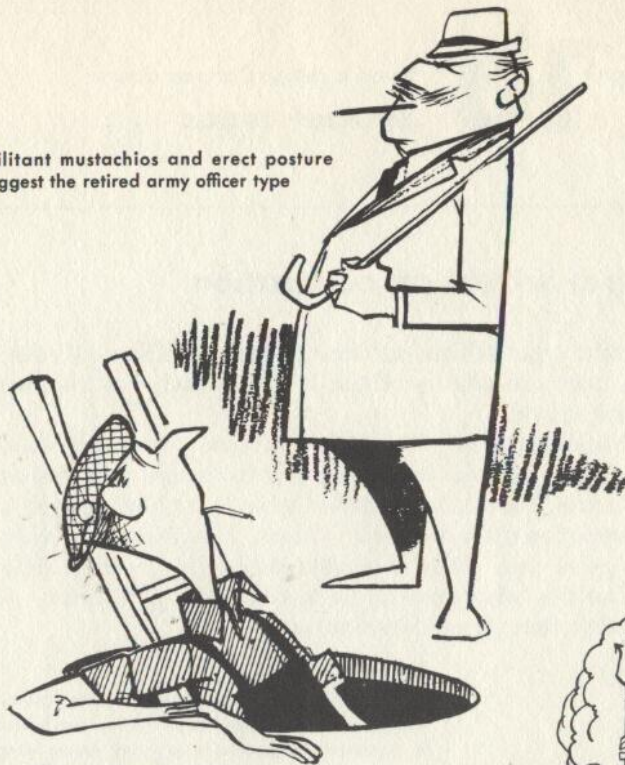
For instance, most ballet dancers are slim from exercise



... whereas vocal exercise seems to create heft in the prima donna of grand opera



Militant mustachios and erect posture suggest the retired army officer type



Going through pipes and manholes calls for thin fellows



There are plenty of good old symbols to help show character

A real-life prizefighter may collect 18th century teaspoons, but you draw him like this



A real librarian might make extra money wrestling on TV, but here's the popular conception of him



Scrub ladies are now thoroughly unionized, and not the pitiful critters they once were — but draw 'em downtrodden



All gals—we read this somewhere—aren't really irresistibly charming—but it pays to draw them that way





## Types within an occupation

Certain types within an occupation will differ. All the men on this page are officers of the law, but each has his own special characteristics.

While we're on the subject of law, remember cops have a tough and serious job. Some not-too-bright cartoonists, mostly in "comic" books, have caused trouble by having their cops outsmarted too often by their villains. This makes the villains look too good and leads to investigation by juvenile delinquency authorities who demand censorship. Keep it funny — but remember that crime does not pay.

Study these characters. Notice how the requirements of each job have affected their clothes and personality. As a cartoonist, you must study and know what makes a type. Types are your business.

RUBE  
GOLDBERG



**Private eye**

—good looking ladies' man, but tough  
—movies and TV set this type



**Western sheriff**

— all man — lives by his guns



**Federal man**

—looks and acts like a businessman



**Cop on the beat**

—over-weight and big feet —unless he is a young eager beaver



**Hotel dick**

—fat, lazy and sleeps most of the time



**Small town sheriff**

—farmer type—loves to put city fellows in their place



**Railroad dick**

—big and tough — spends most of his time outside — his stick is his law



**Motor-cycle cop**

—dashing show-off



## Special types

The public has become used to associating specific types of figures with certain occupations. Over the years, these particular exaggerations have become standard, but remember — variation from the standard is what makes your own style. On this and the following pages, your faculty shows you some special types which will be useful to you as a cartoonist.

MILTON  
CANIFF



**1. All-American Boy** — The maiden's prayer: blonde, curly hair, with muscles, only more so. Straight off a California beach and out of your anatomy section  
**Clothes** — Here, very few, but when dressed wears the junior executive models with touches of Yale campus  
**Expression** — Smiling, nonchalant, except when scowling about villainy. Smokes pipe



**2. Doorman** — An advertisement for what's inside his door, so he is smartly turned out  
**Clothes** — White gloves, with uniform. Usually, the better the joint, the less gold braid. Can be gagged-up with really outlandish uniforms for all-out comic work  
**Expression** — An official greeter, his business is to smile. When the tip is too small, he doesn't. Lordly with bellhops



**3. Showgirl** — Rosy McGee, now "Cuddles La Torch." Has a heart of gold mined from visiting firemen. She's really a good kid in a tough racket  
**Clothes** — Few but exotic, with special attention to the hair. Furs in winter, feathers in summer. Jewelry accents. Her figure must show  
**Expression** — The big smile



**4. Miss America** — An American Ideal, so she has to be not only beautiful, but sweet and simple at heart. The little girl who used to live next door and wear braces  
**Clothes** — On show, bathing suit. Otherwise, very chic sports and evening wear  
**Expression** — Smiling, loving life, except when worried about her little brother whom the All-American Boy will save

HAENIGSEN



**1. Studious Co-ed** — Slim, almost gaunt, vitally interested in classical studies. Hobby: ceramic earrings. Uninterested in men, except biology professors  
**Clothes** — Up-to-date and good, but sloppy for the campus. She might be persuaded to take off the glasses and wow 'em in an evening gown  
**Expression** — Perplexed or very intent — uses her hands a lot when talking



**2. Forceful Female** — Built like a fullback, packed with energy to disrupt normal routine — nearly everyone has an aunt like this, named Gladys  
**Clothes** — Up-to-date and functional, except her hats. Umbrella shows preparedness; the large handbag holds everything from knitting to a 1/4" electric drill  
**Expression** — Extreme, happy confidence to belligerence in the presence of males



**3. Librarian** — Overworked, undernourished and weak in the eyes. Meek and mild. Eats health foods, but has a whopping vitamin deficiency  
**Clothes** — Respectable but seedy, due to salary. Eyeshade and light work jacket are standard  
**Expression** — Hunted



**4. The Banker** — Short and paunchy, the shape of an old-fashioned money bag, his hair scanty due to pressure of financial affairs  
**Clothes** — Formal, black coat, winged collar, and striped pants. Stickpin and spats optional  
**Expression** — Distrustful, except in the presence of obvious millionaires. Self-confident and accented by a fifty-cent cigar



RUBE GOLDBERG



**1. Cook**—The chef is a creative genius, a man of the world, an artist. The pointed mustache is standard equipment — all comic chefs are French. A good cook tastes his own dishes — hence the full figure  
**Clothes**—Floppy chef's hat and full apron, whose cleanliness depends on the type of restaurant. Striped or checked pants  
**Expression**—Being French: violent. He'd be tongue-tied with his hands in his pockets



**2. Cute Waitress**—Shapely, non-chalant and wisecracking. Able to bat off the wolves and keep the customers coming back. Usually blond  
**Clothes**—Abbreviated, with high heels. Lace apron and cap, pencil and menu are props  
**Expression**—Phony-demure, the made-up lips smiling. This kid is pretty and knows it



**3. Scrub Lady**—Hardworking mother of six strapping men—all of whom live off her. Brawny, earthy, and unintentionally witty. A sloppy worker  
**Clothes**—A rag bag special, with apron. Always in company with pail and mop  
**Expression**—Either extremely serious or cackling with unholy glee. Hair-do is last year's rat's nest

WILLIAM MULLIN



**1. Bum** — A misunderstood gentleman who has been unkindly treated by Fate. Allergic to work, with an affinity for the finer things of life  
**Clothes**—Modish, four or five owners ago. Wrinkles, baggy and beat-up, with patch-work and fringe  
**Expression**—Wary and shy except in the company of his fellows



**2. Wrestler** — Usually an ex-pug, note nose and ear. A real Neanderthal type, all muscle and no forehead. Small, bullet head and huge torso  
**Clothes**—The shoes and trunks of the trade. Hair on chest and limbs keeps him warm  
**Expression**—Features have been scrambled by his work, but don't make him gruesome —he's lunk-headed but human, honest



**3. Dowager** — "The Lowells speak only to Cabots, and the Cabots speak only to God." She won't join the 400 because they aren't exclusive enough for her. Shaped like a pouter pigeon  
**Clothes**—Here shown in full battle, or evening dress. Beads, gloves, lorgnette, tiara and lifted pinky are equipment for the standard model  
**Expression**—Extremely haughty, with nose lifted. If it rained, she'd drown. Very grim except to members of other Royal Families

**4. Active Sportswoman** — Vital, alive and alert to everything that doesn't require book learning. Her sports car is seen at the best country clubs  
**Clothes**—Brief sports clothes to show her attractive, athletic figure. In winter she tows her dates to mountain tops in smart ski outfits  
**Expression**—Smiles, showing large healthy teeth. Active figure expresses most of her emotions



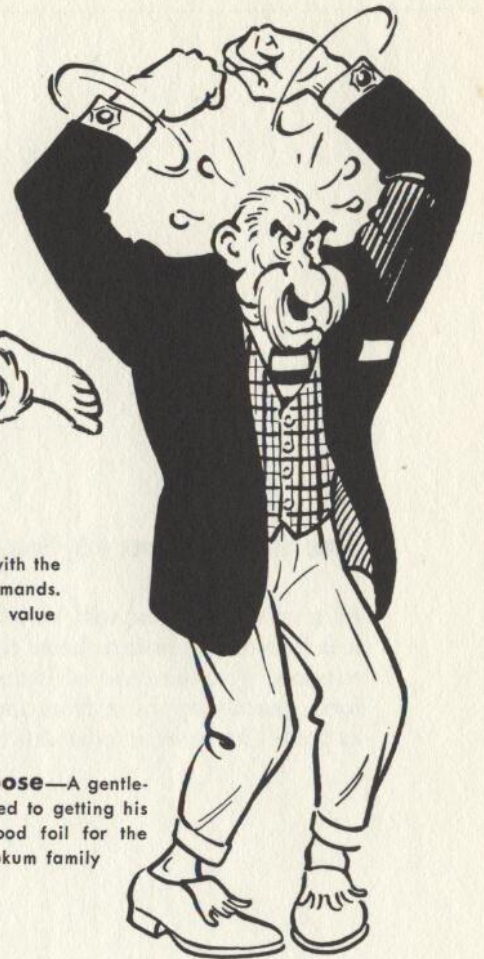
WHO'S FOR TENNIS?



**1. Nightmare Alice**—The local Dogpatch witch. Her erratic magic powers are great for getting hillbillies out of—and into—trouble



**3. Wolf Gal**—A female wolf, with the same morals as the pack she commands. Loves men—but only for their food value



**4. General Bullmoose**—A gentleman of the old school, used to getting his own way—or else. A good foil for the sweet innocence of the Yokum family

**2. One of the Scraggs**—There are three of these unsanitary boys in the Scragg family. Useful for unadulterated villainy, Dogpatch style



## Whitney Darrow, Jr. —

### Characters from life

One of the best ways to develop characters is to sit down and draw people. Mr. Darrow has the good habit of sketching people as he sees them — and to him all people are characters. Taken from life, his characters-on-paper come alive later when he needs them to put an idea across. A true observation of the little details that add up to particular characters is a must for every cartoonist, from the wildest slapstick to the most meticulous adventure man. True-to-life characters start with real people.



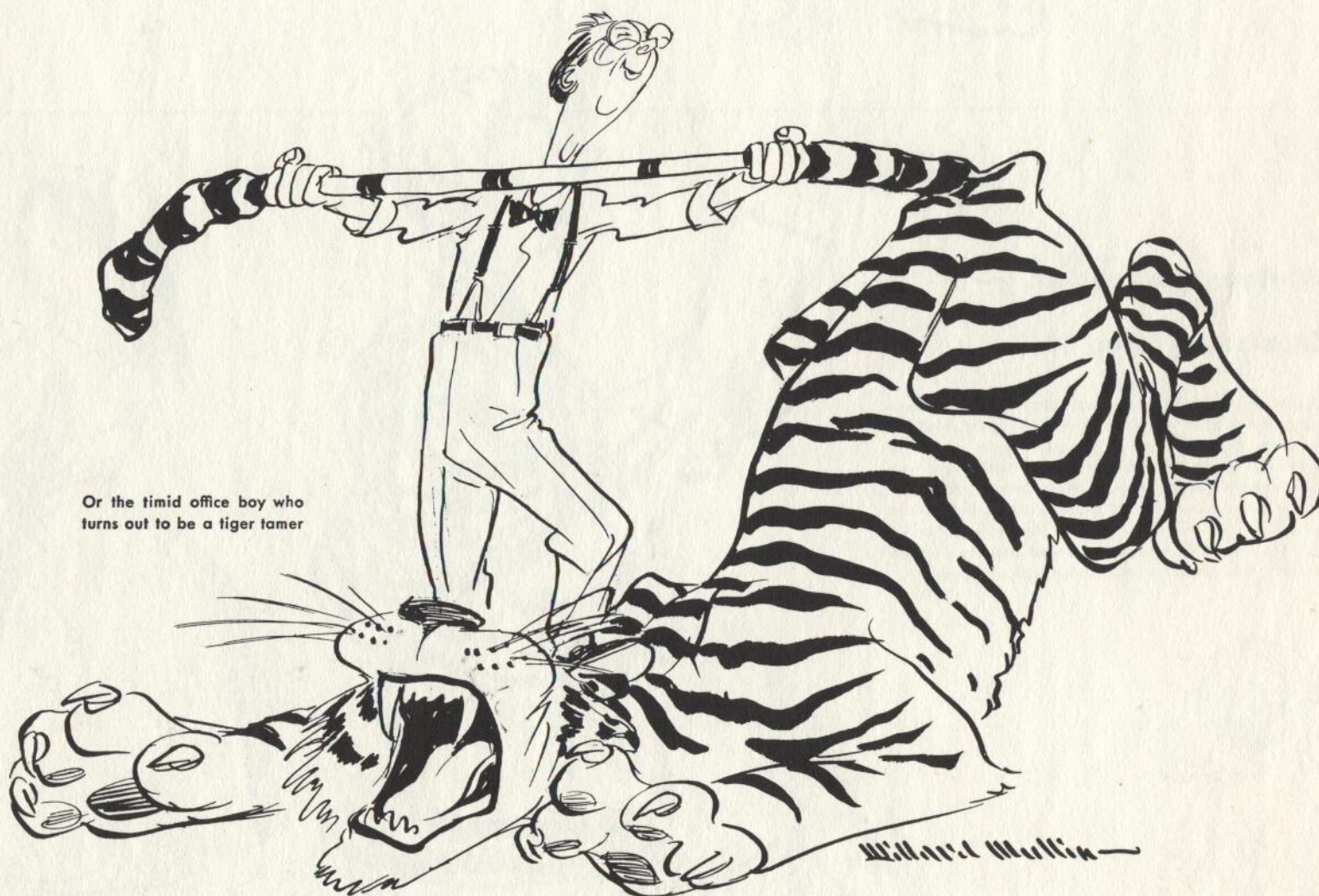


### The exception to the rule

As a cartoonist you will be doing satire much of the time, and it is here that you can throw the rules pertaining to type out the window. For the sake of humor, you have your character perform exactly opposite from the way the reader would naturally expect. The reverse twist can be good humor.



For example—the li'l ol' lady who pulverizes this hulking brute with a smashing left (it could only be Mammy Yokum)



Or the timid office boy who turns out to be a tiger tamer



FAMOUS ARTISTS CARTOON COURSE  
Student Work  
Lesson 10

To study and practice

This lesson deals with the casting of characters for your cartoon productions. Cartoon characters should be immediately identifiable as to type or occupation by their build, clothing, and actions or a combination of these characteristics since this helps to move your story along quickly and easily.

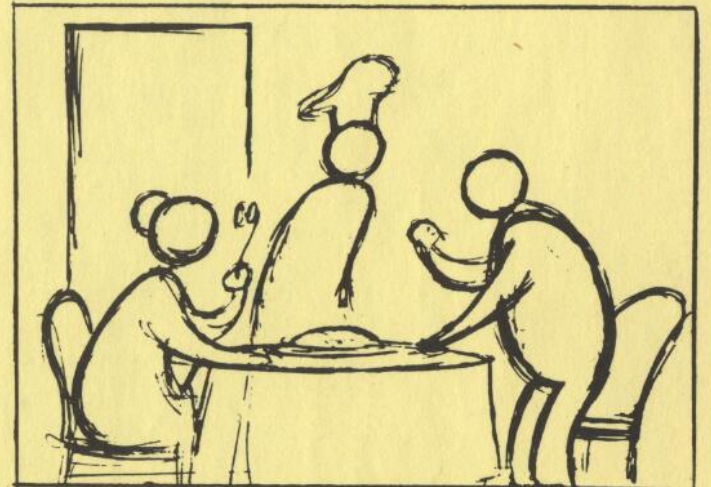
You can and should practice drawing the types shown in the lesson -- and go on from there to add your own refinements. Work up your stock characters to your own liking and draw them in different actions to get acquainted with them. Remember: What you add to or subtract from a type should be the result of your own observation and imagination. The lesson does not show all the stock characters in cartooning -- far from it. Sketching from real people is important in building any authentic character. Sketching puts knowledge into your head and adds life to your cartoon characters.

In these assignments we will grade your work chiefly on your ability to draw recognizable types in good action and with appropriate facial expression. Keep backgrounds, if any, simple so that your characters stand out clearly.

The assignments you are to mail to the School for criticism

ASSIGNMENT 1

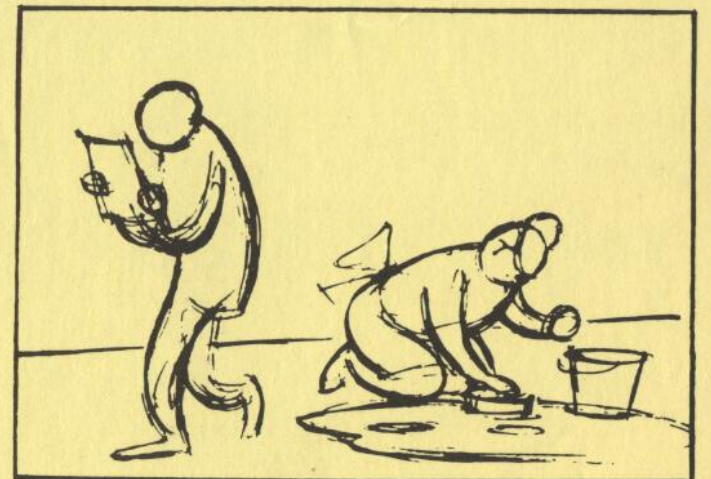
A local baker wants you to draw an advertising cartoon to be printed in the town's weekly paper. The cartoon is to show a Dowager and a Banker type seated at a table in an expensive restaurant. The Banker has just been served the wrong brand of bread and is arguing violently with a French chef while the Dowager watches through her lorgnette. Follow the sketch at the right for figure placement -- it's the one given you by the local baker for layout -- but it's up to you as a cartoonist to make the figures clearly represent the types called for and to give them the action and facial expression suitable to the situation. Do it with pen or brush and ink, in a panel 7 inches high and 10 inches wide, on a sheet of 11 x 14-inch Bristol board.



IMPORTANT - Mark this sheet ASSIGNMENT 1.

ASSIGNMENT 2

On another sheet of 11 x 14-inch Bristol board, in a panel 10 inches wide and 7 inches high, draw a cartoon showing a meek, studious, bookworm type of man reading a book as he tramps across a floor being scrubbed by a cleaning woman. He is unaware of his crime -- she is astounded and furious. You may follow the sketch at the right for figure placement or, better still, dream up your own composition.



IMPORTANT - Mark this sheet ASSIGNMENT 2.

Present your assignments in the same clean, professional manner you would use if you were submitting them to the cartoon buyer of a publication. Letter your name, address and student number carefully in the lower left-hand corner of each page. In the lower right corner, place the Lesson Number and Assignment Number. Mail to:

FAMOUS ARTISTS CARTOON COURSE  
Westport, Connecticut

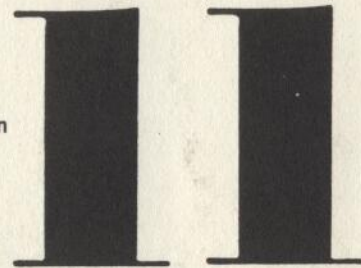


**Famous Artists Cartoon Course**

**Westport, Connecticut**

# **Drawing in the panel**

Lesson



Rube Goldberg

Milton Caniff

Al Capp

Harry Haenigsen

Willard Mullin

Gurney Williams

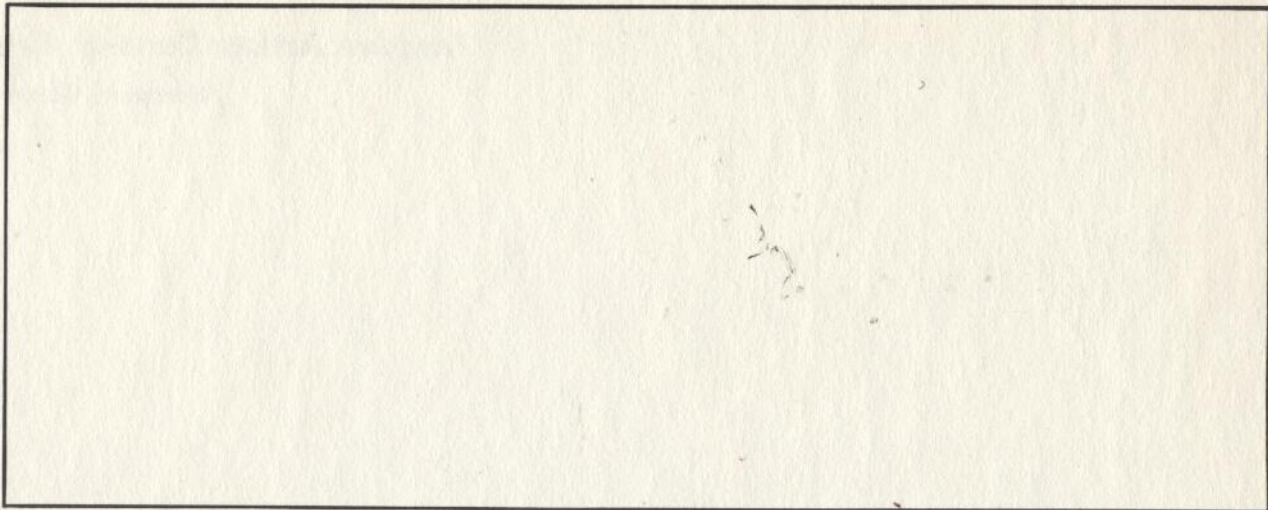
Dick Cavalli

Whitney Darrow, Jr.

Virgil Partch

Barney Tobey

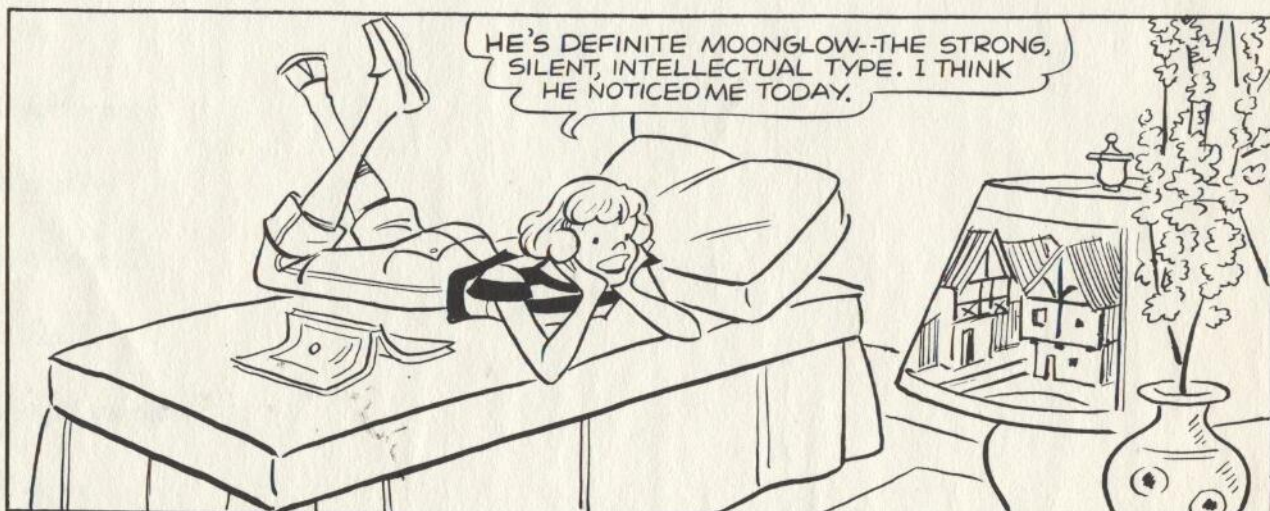




The panel is your stage



As a cartoonist you must design the scenery and place it on the stage



Then you must create the characters that are to perform on the stage



## Drawing in the panel

In Lesson 5, we touched lightly on drawing in a panel so that you would start working that way. Now we are ready to go into this problem in more detail. Ninety percent of your work as a professional cartoonist will have to be done within a panel, so you can see how important it is for you to understand the problems that you will come up against.

As we have said before, the panel is your stage and it is your job to put the characters and actors in it. Where and how you place them will have a lot to do with the success of your feature.

For the time being, don't worry too much about backgrounds. Later on in the Course we will cover these in detail. For now, we are more interested in the proper placing of the figure in the panel.

Lots of beginners start off by drawing the figure first and then, if they like it, drawing a panel around it and finally the background. This would be swell if you never had to worry about the size or shape of your panel. But cartooning in respect to panels and proportions of panels is an exact art. An editor asks you for a cartoon panel of a certain size. The size he asks for is the size he wants — and he will mark you off his list if you don't give it to him. Normally you will work larger than the size the drawing is to be reproduced, so you must be sure that the panel will reduce to the size desired. The only way to be sure of this is to scale up your panel to the correct proportions. After checking it, you can start your drawing. Space in a newspaper or magazine is valuable. If you should send a drawing to an editor, and that drawing is the wrong size — say an inch and a half too high — he has two choices. He can throw the drawing away or have it redrawn. If he doesn't have time for redrawing, he may use your work, but he will be robbing himself of an inch and a half of valuable space that could be sold for advertising.

Here's another reason for learning to draw in a panel frame. If the beginner starts out just drawing any old place he feels like on a piece of paper, he soon becomes accustomed to working that way. When he is given a picture frame and told to draw a figure in it, he doesn't know how to proceed. The panel frame has a psychological effect upon his sense of proportion. He won't know where to start drawing the head or the figure. When he does start it, chances are the feet will run out of the bottom of the picture. Drawing is a habit — and for your own future good you should develop, as you go along, habits which will help, not hinder you.

Your panel can show a thousand miles of territory or it can show just the hand of a character. Think of it as a cameraman does in the movies. Before starting to pencil in a panel, decide whether you want a distance shot or a close-up. Most of the time the story you are telling and the action of each individual panel will determine how much or how little you will show. If you are going to show a cowboy being thrown from a horse, you wouldn't want a close-up of the cowboy's head; you would need enough distance to show the whole action. If the cowboy is going to wink at a girl, you would want a close-up shot. By thinking first, you will save yourself a lot of trouble.

As you will see later on in this lesson, the placing of the figures themselves within the picture frame will many times set a mood for the over-all scene. This placement of cartoon figures for their mood value is very important to putting over an idea. Many times our daily comic strip of four panels will be best when all the figures in all four panels are placed exactly on the same level. Again, on the very next strip you might find that Panel 1 will show a full figure; Panel 2 a close-up; Panel 3 a far-distance shot; and Panel 4 another close-up. This is known as "change of pace." This change of pace is very important and adds color and interest to your work, but be sure there is a reason for it.

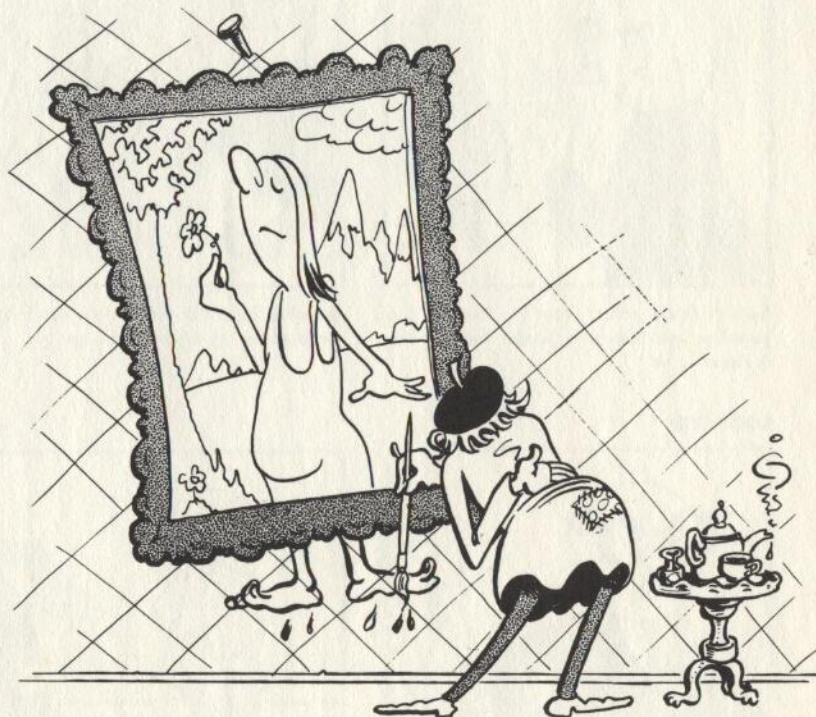
Also in this lesson we will take up the procedure for drawing a Sunday page or a daily newspaper comic. The differences between drawing a single panel cartoon and a daily comic strip are quite fundamental. With a single panel cartoon, the artist is more concerned with putting over one individual idea, usually with a wallôp. He is not particularly concerned with what came before or what came after — the whole idea is shown in one panel. The artist drawing the comic strip, on the other hand, is concerned with first putting across his idea — not in one panel, but in a series of panels. He must carry his reader's interest from the first through to the last panel and at the same time tell his story, both visually and by the use of the balloons.

### The panel is your stage

Someone once said that every cartoonist is a frustrated ham actor. Since the average cartoonist usually eats with more regularity than the average actor, the frustration should be easy to control. A cartoonist's interest in the stage can really be an asset. The panel has its definite limitations — so has the stage. Your job is to present a clear, interesting production within your confined space.

Milton Caniff had a close squeak when he almost became a professional actor after college. Today, his advice to a young cartoonist is apt to be full of stage and movie lingo. The business of stage settings, movie close-ups and long-shots also applies very pointedly to drawings. Caniff's "Steve Canyon" doesn't suffer because of his knowledge. Neither will your work.

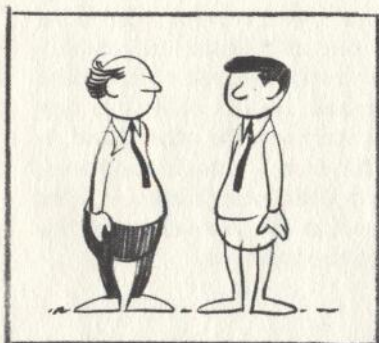
When we tell you to accustom yourself to working in a panel, we don't mean just for your finished art work. You should also work in a panel when you are doing practice work. For your practice work on these lessons, rule up a bunch of panels beforehand on your paper. It doesn't make any difference what size or shape the panels are, just so there is a panel outline to confine you to a given space. Once you have formed the habit of thinking as well as drawing in panels, you will find that you prefer to work inside of panel frames.



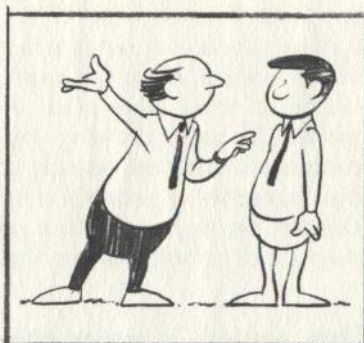


### Position sets up the idea

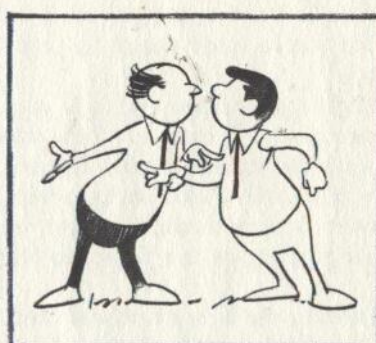
The way you place figures in your panel and the action you give them will determine to a large degree how fast the reader gets your idea. In these small panels some basic ideas have been set up by the position of the figures, without the use of any words. It is the action that tells the reader what is going on, and to emphasize this point the facial expressions have been purposely omitted.



Here are two figures in a panel — both of them are static — the picture tells no story at all



One figure leans forward and points his finger. The reader knows he is talking



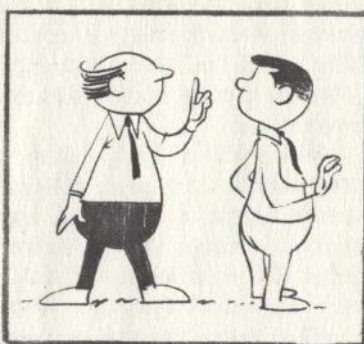
Here both figures are leaning forward — you know they are arguing



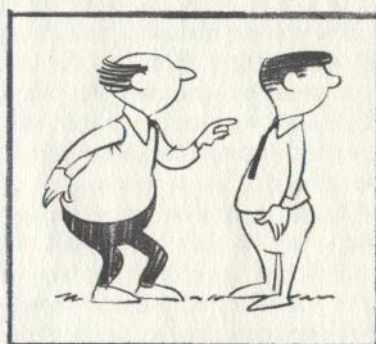
Now the figure on the left is overpowering the other figure



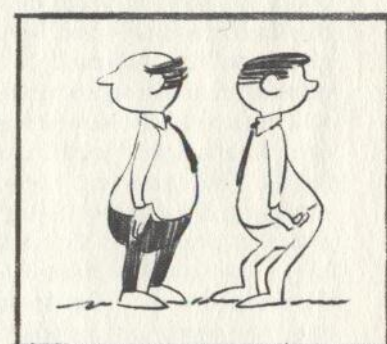
The figure on the right is showing disdain by turning his back to the other figure



By turning just his head to the figure on the left the man on the right is saying "Did you say something?"



The man on the left is talking about something behind the man on the right

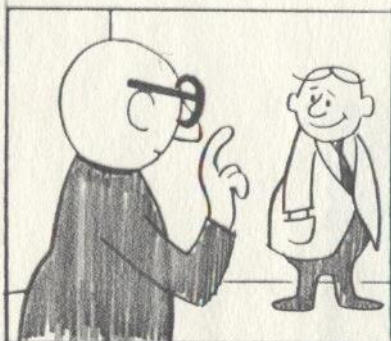


Bodies facing each other, but heads turned away indicate that they are looking for something or someone

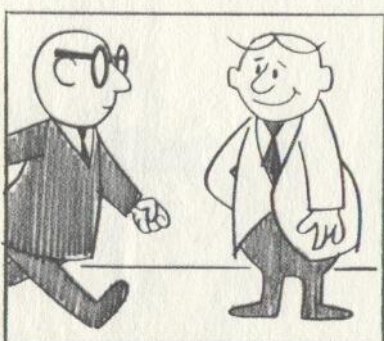
### In and out of the panel

Comic figures don't always stay put. Sometimes you will want to show the figures you draw coming into or leaving the panel — here are some examples of how this is done.

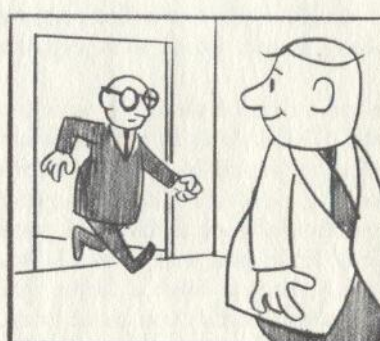
#### Entering



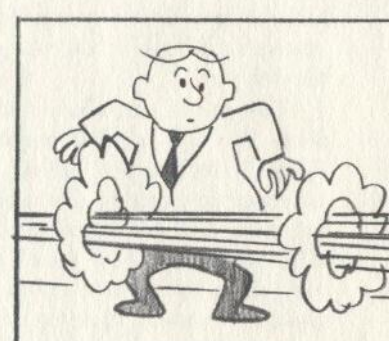
Here a figure enters from the front of the panel — front figure is larger because he is closer to us



Entering from the side — maintain correct proportions of figure entering



Entering from an angle



Here we don't see anything but speed lines — but we know something has entered and left the panel

#### Leaving

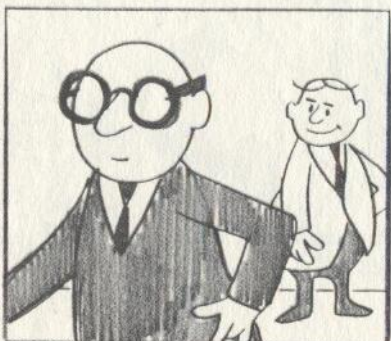
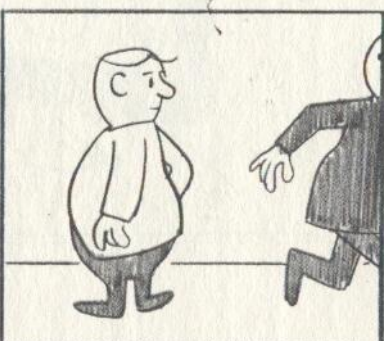
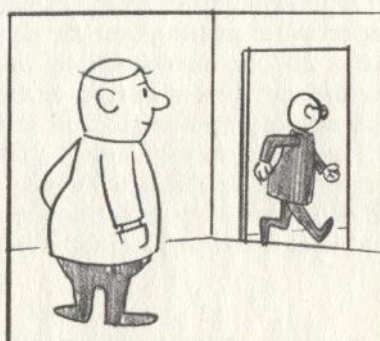


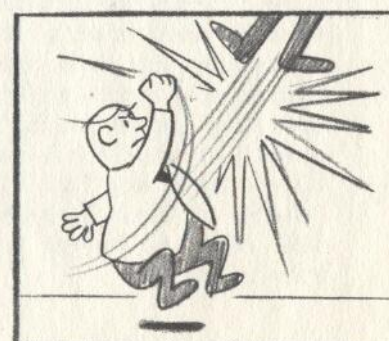
Figure leaving panel at the front



Leaving from the side



Leaving at an angle



Leaving from the top of the panel



**Part of figures out of panel**

When only parts of your characters appear within the panel, it is wise to pencil in the figures completely. This enables you to relate them properly in size and to give more convincing action to the visible portions. Do the same with figures entering or leaving the panel.

**Wrong**

Here's a common mistake — their heads have been drawn on the same level. This gives the reader the feeling that Shorty is standing on an invisible support

**Right**

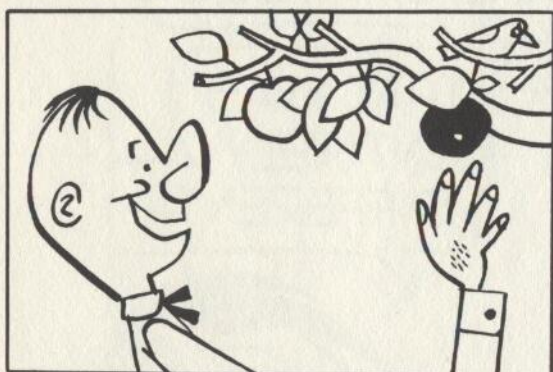
To avoid that mistake, pencil in the lower halves of the figures as shown. This extra effort will result in a more convincing relationship between the portions of the figures visible within the panel

Here's our subject — two characters talking. Their sizes already have been established in the reader's mind; one is tall and one is short

**Maintaining proportions of cut figures**

When you are drawing part of a figure in a panel, you must be sure that the parts shown are in correct proportion to the figure as a whole.

Here are two drawings of a man reaching for an apple. In the drawing below, the hand, as shown in the panel, couldn't possibly belong to the man because his arms couldn't be that long

**Wrong**

Arm would be too long

**Right**

Here the arm is in the right proportion to the rest of the figure



Here is an example of how Milton Caniff makes sure that the proportions of his figures are correct when only a part of the figure is in the panel. Notice that part of the gun is drawn out of the panel, too — whenever you have the space around your panel to draw the rest of the figure you should do so. It's good insurance against mistakes in proportion



## Position of figures and balloons

As shown on this page, the figures in a panel must be placed in a position that will permit the correct reading of the balloons.



**Wrong** This is wrong and should never be done. The question is answered before it is asked



**Better** In an emergency this could be done but it is not a good idea



**Right** This is right — the balloons and figures are both in the right order to be read



In a comic strip it is sometimes impossible to shift the figures so that their balloons can be read in the right order — here are two ways to overcome this

By lifting the first balloon over the second you force it to be read first

But the best way is to change the wording of the balloon so the figure on the left is the first to speak



With this device Milton Caniff created hesitation in his character's speech before springing the joke. To show indecision, change of mind or confusion, any number of short balloons from the same character in the same panel can also be effective



Since your readers are used to reading from left to right and from top to bottom, make it a rule to arrange your drawing so that the left-hand character speaks first. Place balloons of right-hand characters on the right and, if possible, a bit below the level of the first balloon. In single panel cartoons it also pays to place the speaker on the left and keep his mouth open so the reader knows who is speaking



## Composition

In cartooning, composition is used solely to point up your gag or draw attention to the action of your characters in a story. Composition is the tool you use to add clarity to your work, much as re-writing and elimination add punch to your gag or story. You must be aware of it with every line you draw.

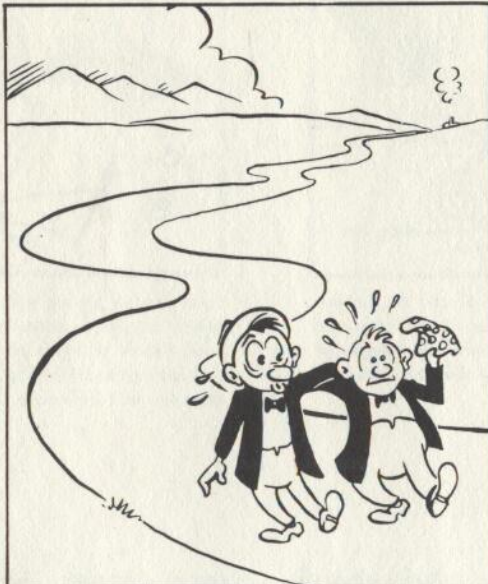
Like politics, composition is a subject people can argue about forever and arrive nowhere. There are no hard and fast rules — your composition-sense will grow to be as personal to you as

your style of drawing. However, certain things catch and interest the reader's eye, others repel it. We have tried here to give you a few important fundamentals to start you off.

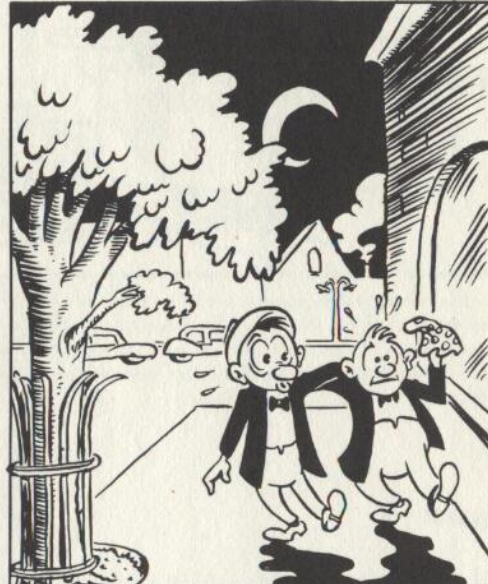
This is a part of your art that should keep growing with every new picture you draw. *Think* when you draw: think of blacks and think of whites — will this or that line help guide or distract your reader's eye? If a line or tone doesn't help direct the eye to the right spot, change it or eliminate it.



Your idea calls for two tired figures. Here they are placed in a panel with room to develop the idea. Composition will help or hurt that development



Here the figures have a composition that shows why they are tired, and the winding road that tired them leads right to them



Same figures — but the idea was a little different. Composition is entirely changed, but still leads interestingly to the figures

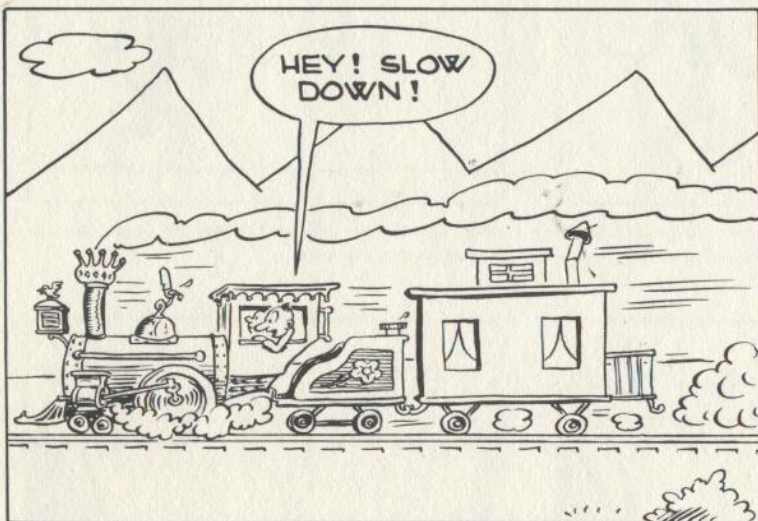
## Make it interesting

In today's competitive market, a cartoonist can't get very far without imagination. A picture may be drawn with painstaking correctness and still be uninteresting. To be uninteresting is the greatest crime a cartoonist can commit.

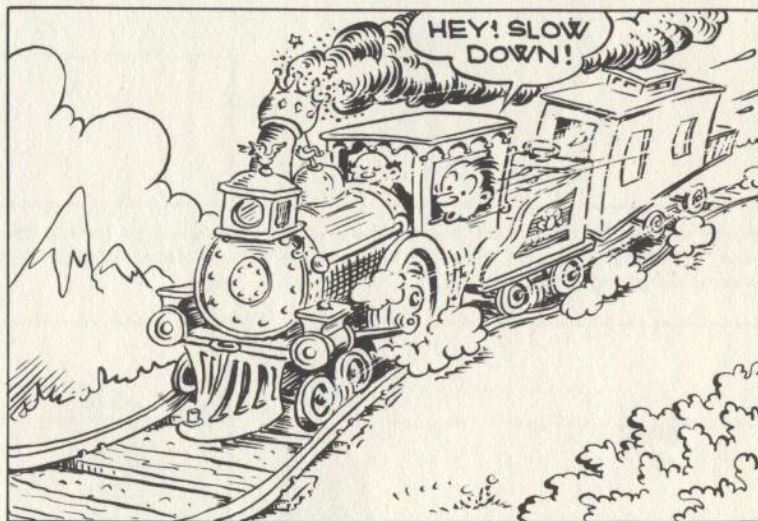
When composing your panel, don't just draw your subject so that it is recognizable. *Think*: can you include some action or a different viewpoint that will be exciting to the reader's eye? Perspective, action, background — all the elements of cartooning must be considered as ingredients that can help you make interesting compositions.



Formal balance is for statues. Very little of it is seen in living figures — which are what we try to create



Nothing wrong with this, but it's a bit flat. Could we compose the speeding train into a more interesting picture? Let's try it



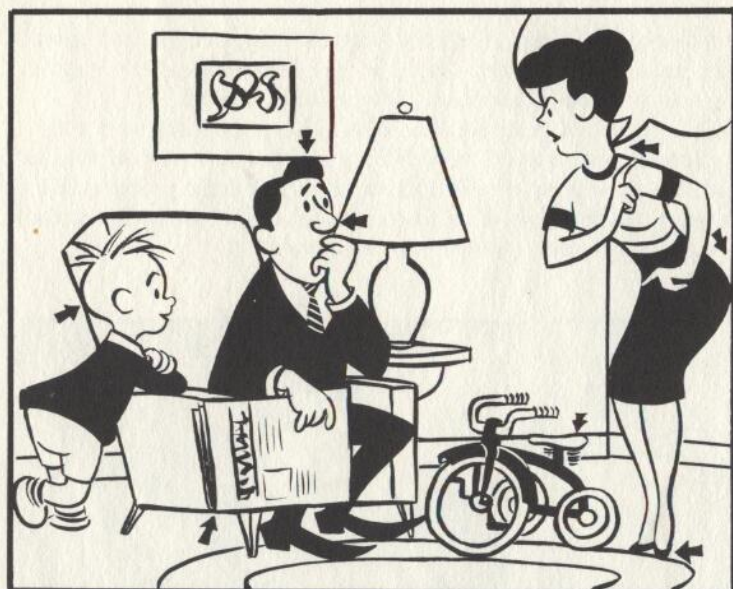
Sure! By changing the view and getting an interesting relationship of spaces — draw a worm's eye view if you feel it will make it more interesting



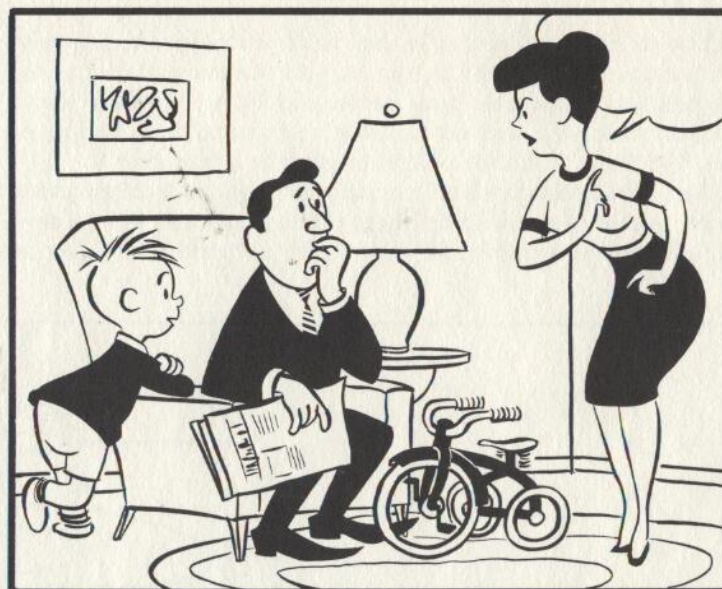
## Contact points

Confusion in a drawing is bad unless your idea deliberately calls for it. If you allow two elements or lines to touch in a picture (such lines are called tangents) you create the illusion that both are the same distance from the reader — although one may be in

the foreground and the other in the background. This impairs the feeling of depth in the cartoon. Accidental points of contact hit the eye the way sour notes hit the ear. The two drawings below show some visual crimes of this type and how to avoid them.



Here the picture frame appears to rest on the man's head. His nose and finger seem to be attached to the lampshade, and the tangent formed by the chair bottom and the lower edge of the newspaper makes it difficult to tell where one form leaves off and the other begins. There are a dozen more of these "clinkers" than are indicated by the arrows. See if you can find them

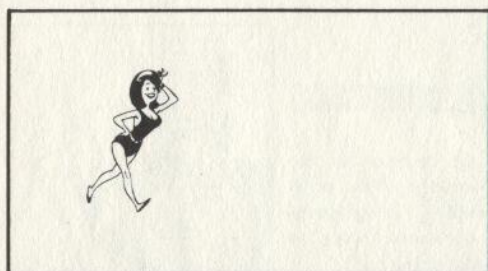


Compare this picture with the previous one and note how the troublesome contact points have been corrected. Bad contact points should be avoided in the pencil stage (when you're inking it's too late) by overlapping the elements decisively or by keeping them definitely apart. Of course, if two forms are actually intended to touch (as with the man's elbow on the chair arm) there is no problem

## Space

Just as shapes are important to a picture, so is the relationship of space to these shapes. Space is used to show the distance between objects on a flat surface and, more important, to create an illu-

sion of distance. The proper use of space around your figures gives an illusion of depth and also contributes to the mood of the picture.



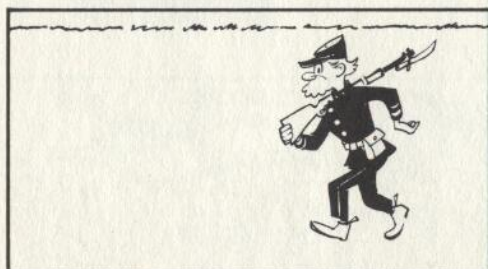
Surrounding a tiny figure with a large amount of space places the figure in the distance



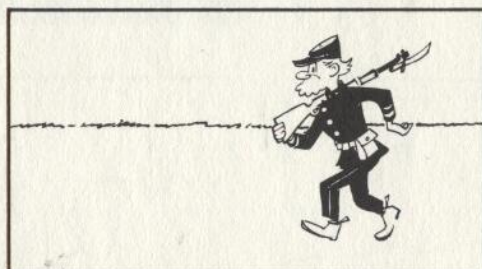
Enlarging the figure decreases the surrounding space and brings the figure closer



Enlarging the figure further brings it in for a real close-up view



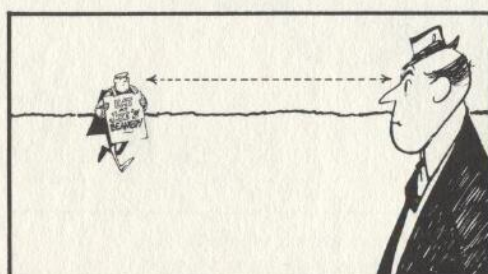
Division of space by the horizon line can govern the feeling of distance and mood. Here the figure, dominated by the ground space, seems lonely



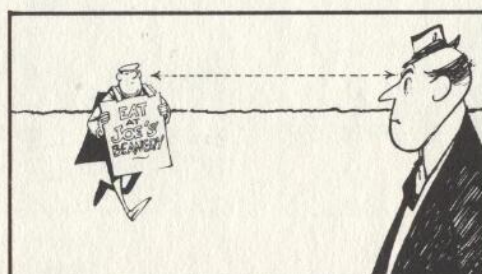
Lowering the horizon line decreases the ground space and makes the figure appear more important in the scene



Here, with the ground level below the figure, the old boy dominates the scene



When one of two figures is drawn very small they seem far apart. (But compare length of arrows in panels)



Drawing the sandwich man larger reduces this apparent distance between the figures



When the figures are drawn approximately the same size they appear to be quite close together



## Solid white and solid black

Present-day comic strips are printed so small that it pays to think twice before putting any of that grand old pen shading in your work. It's apt to close up and look like hair — and hair doesn't grow on chairs or doorknobs.

Always be alert for chances to simplify your work into solid whites and blacks. For an object to stand out in a composition

it must contrast in value with the surrounding area. Solid black is a great eye-catcher, but over-use makes it tiresome. Clean white space is just as powerful. When you draw solid whites and blacks, keep the outlines sharp and clear-cut so that the shapes are easily recognized. Over-shading can ruin your outlines — avoid it.



**Wrong**

Here is an overdrawn night scene. With too many pen lines of the same weight there is no variation in values — everything is flat



**Right**

Here the whole drawing has been simplified by using solid blacks and whites. Notice how the clean whites stand out and add depth to the composition



Note that there is a minimum of shading within white areas. The use of clear white spaces is effective in night scenes

## Using silhouettes and solid blacks



Interest and depth-in-panel can be increased by use of solid black silhouettes in the foreground



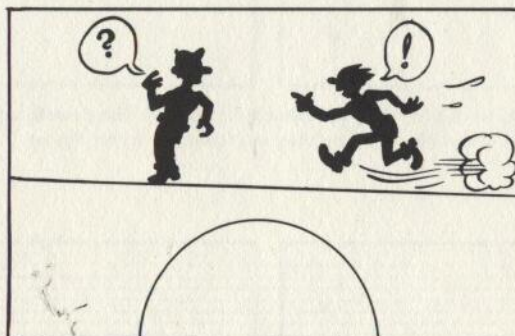
Silhouettes are very helpful for punch and action when you have to draw small



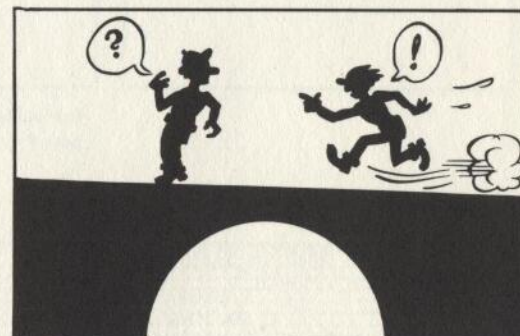
Trees, mountains and buildings in silhouette are effective backgrounds—be sure shapes are definite



Small figures in the distance. Here the detail becomes so small that the action is lost — drawing loses meaning



By using silhouettes, action becomes stronger. Drawing will reproduce much better without all those fine lines



Here the whole drawing is in silhouette. Solid black is a great eye-catcher on a page of line drawings. Be sure your outlines are sharp



At left, small black figure commands attention first. Foreground figure blacked in takes over the stage at the right

Your idea determines which figure is to become the center of interest



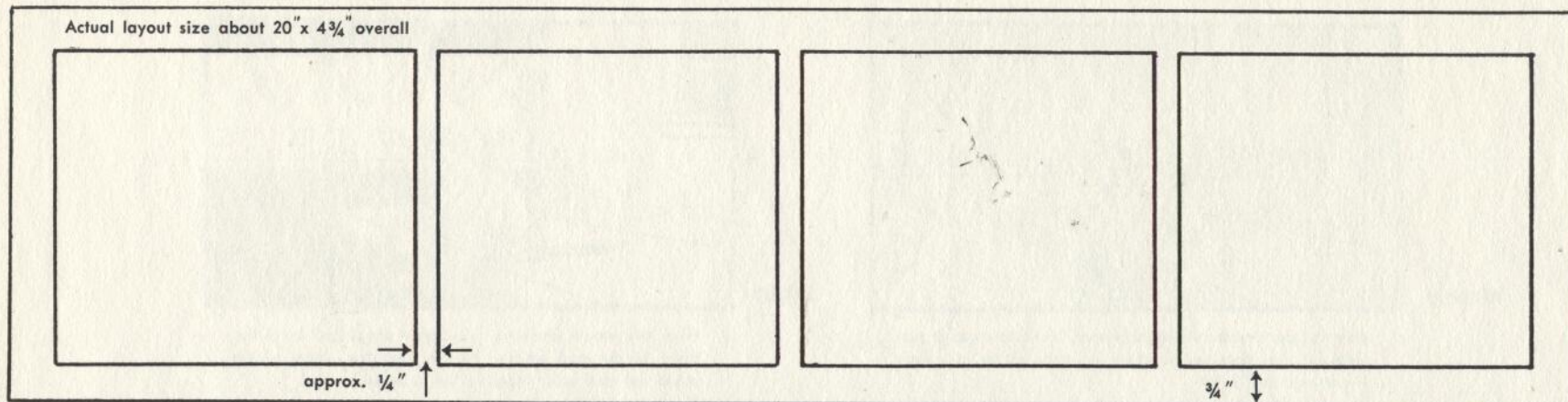
**Wrong**

**Right**

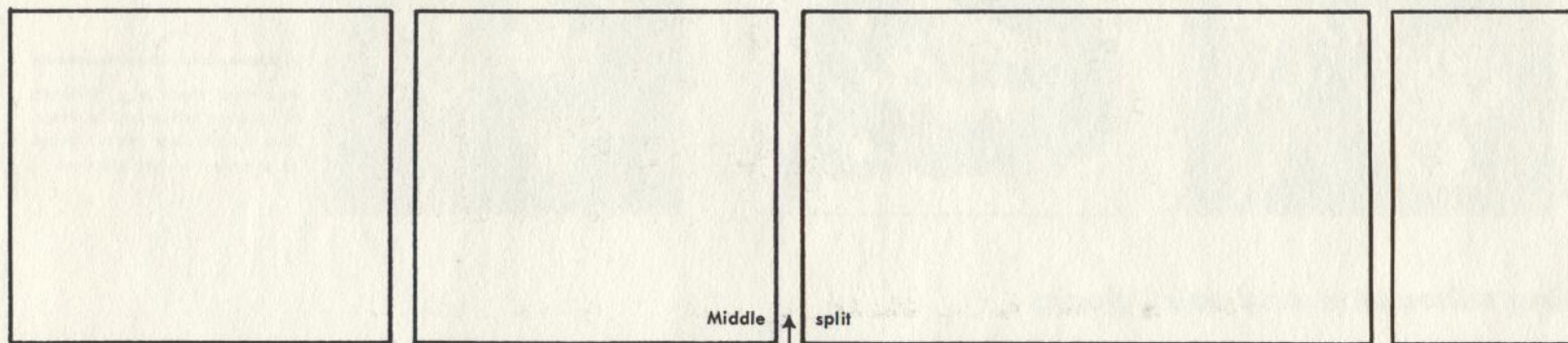
Be sure small silhouettes have definite shapes so action is plain to reader



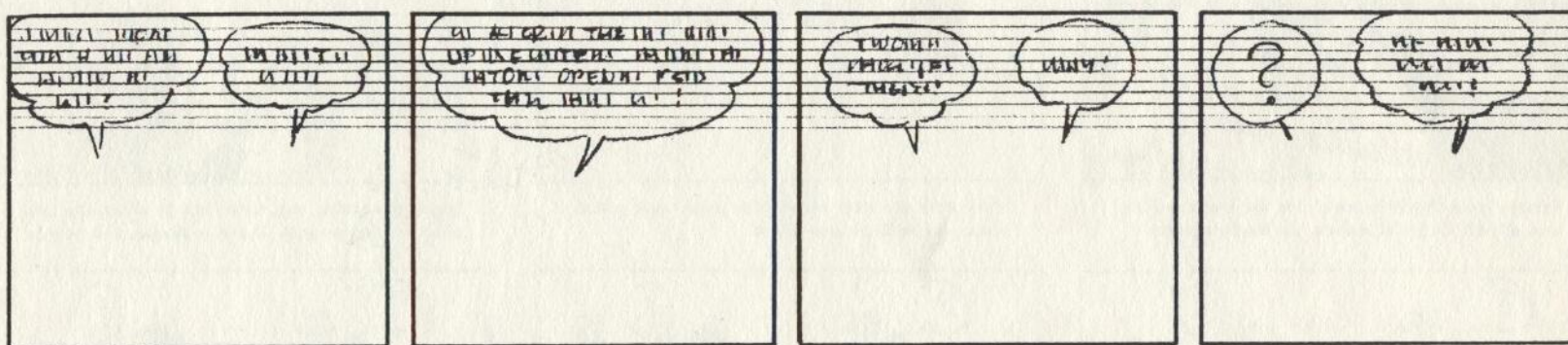
## Laying out a comic strip



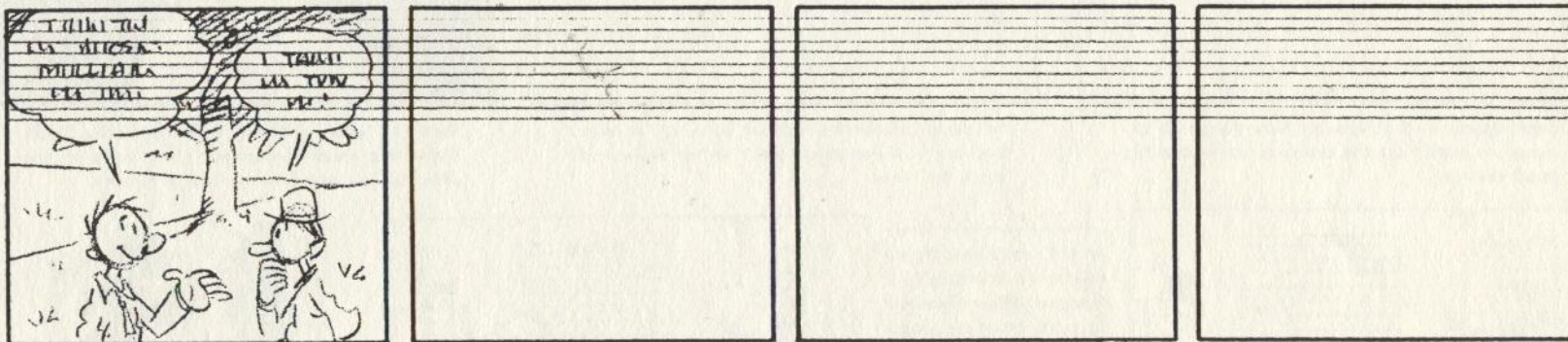
Here is the layout for a daily comic strip. It is drawn in pencil on a hard-surface bristol for pen, or on a rough-surface bristol for brush. Sizes of layout will vary depending upon the syndicate or paper it is drawn for. But always leave 3/4 of an inch border around layout



The strip may be split up any way the artist wishes, but the middle split must always be kept. Some papers like to cut a strip in half and put one half over the other to make a "box"

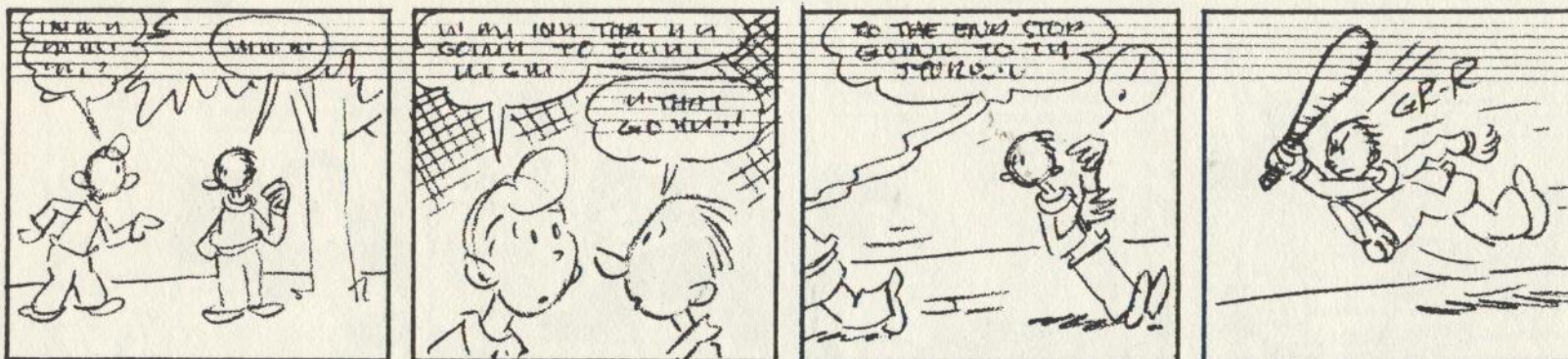


The guide lines for the lettering are pencilled in lightly. Some comic artists prefer to pencil in all of the balloons before they start drawing in the figures.



Others prefer to do balloons and figures together as they work from one panel to the next. This is up to the individual; only you can tell which is best for you





After the strip is in pencil, look it over before you ink it. Have you put over the gag the best way? Can you improve the wording of the balloons? It's hard to change ink — be sure it's right before you pick up your pen



A word about composition — most adventure-type strips have a wide variety of scenes — close-ups, distance shots, half figures in one panel, full figures in the next or maybe just a head or silhouettes

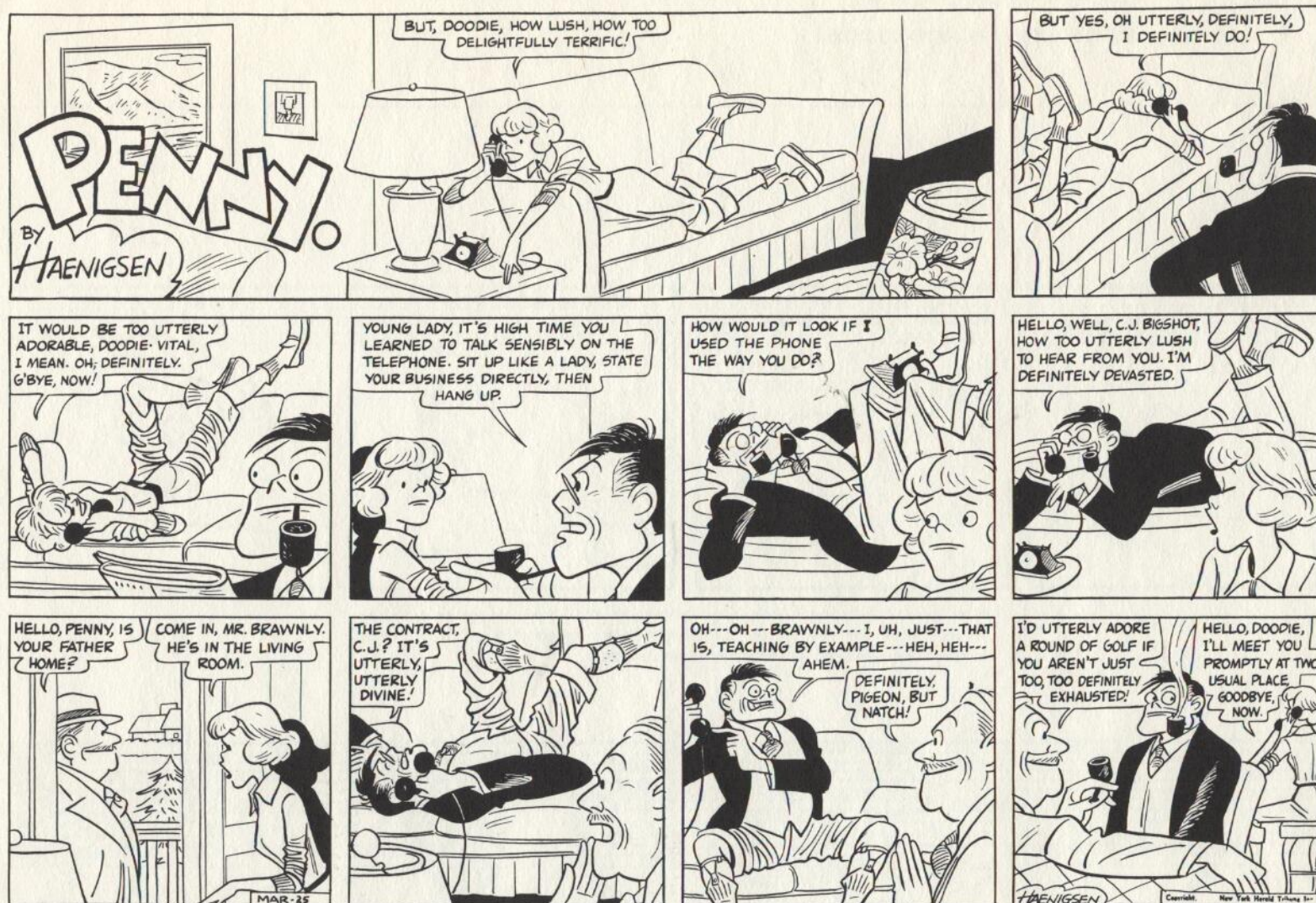


The average gag strip on the other hand, will tend to have all the figures in the strip standing on an even line. This is not a rule — you do not have to do it this way



When the strip is finished in ink — erase the pencil lines before you make any corrections with Chinese white — the white will rub off with erasing — that's why you erase first. Don't forget to clean up the borders too!





## The Sunday page

Each syndicate has certain requirements for the sizes and layouts of their Sunday pages which must be kept in mind if you plan to submit work to them. For instance, here is a Sunday "Penny" as it was drawn by Harry Haenigsen in black and white, but scaled down to fit the size of our book.

This, enlarged, would fill a half-page space in the Sunday paper. But, some papers want the feature in one-third page size and the syndicate must supply them. You notice that the entire upper line of drawing with the heading leads into the story, but is not vital to it. This line can be cut off, leaving the two bottom lines — which, with a small type-set heading, would then exactly fit one-third of a newspaper page. Mr. Haenigsen had to keep this in mind as he developed his gag. For the tabloid page size, photo-prints of the drawing are rearranged to make the over-all layout deeper than it is wide.

Usually any good black and white drawing will look well when it is colored. It pays, however, to keep color in mind when drawing Sunday pages. Careful attention to areas of whites and blacks can make a world of difference in the drawing when reproduced in color. Notice how economical of pen shading Mr. Haenigsen is in "Penny," and how carefully he spots his blacks. This results in good, crisp color reproduction.

In making the printing plates, the engraver works from the master black and white drawing and a color guide. This color guide is a photo-stat of the drawing the size it will appear in the paper, and colored with water colors, colored inks or aniline dyes. Most syndicates have special artists who do nothing but make the color guides for the engraver and printer. However, some of the top men, Harry Haenigsen and Milton Caniff among them, insist on making their own color guides. The results justify their extra work.

Because of the syndicates' production costs and the continual battle for space in the color comic pages, a newcomer's chances of winning acceptance in this field right off the bat are very slim.

The usual procedure is for a cartoonist to build up a good backlog of readership with a daily strip or panel. When the editors feel that the demand is great enough, they will invite him to add a Sunday page to his chores. A number of magazine cartoonists have entered the Sunday comics via this system, but it is usually an invitation-only affair. Very few Sunday pages have leaped into the spotlight full-blown and stayed there.

A sense of color, like your composition sense, of which it is a part, is a personal thing which grows with use. As a cartoonist, most of your work will be done in black and white for black and white reproduction, and that is what this course is designed to teach you. But, on that happy day when your editors are ready to spend all that money for four-color plates of your work — be prepared.





Penny

1/3 page

by Harry Haenigsen



For the 1/3 page size the first two panels — the entire top row — are left out

## Tabloid



The tabloid page size uses the same number of panels as the half-page. The cartoonist must plan his panel-layout so the breaks are correct for rescaling



### Compose for your story

Here are two panels Milton Caniff drew to illustrate this business of composition for cartoonists. In the first he drew the scene in detail, spelling everything out pictorially. In the second panel most of the detail was omitted, leaving just enough to get the *idea* across. Also, moving the camera right up behind the rifleman's shoulder puts the reader closer to the action, and gives him that important feeling of participation. Both panels are well composed, but the second is much better for the purpose. The important thing is to add power and clarity to the story. In case your Russian is rusty, the balloon reads: "The Americans have taken the city — this way!"



Reproduced same size as drawn



FAMOUS ARTISTS CARTOON COURSE  
Student Work  
Lesson 11

The problem of drawing in a panel is essentially one of composition. Composing is the arranging of all the elements in a cartoon in the most pleasing way that will tell your story quickly, clearly and effectively. A good composition puts emphasis on what is important in the situation or gag and at the same time creates a well-balanced picture.

To study and practice

Read the lesson assignment below, think up a suitable idea, gag or situation and how you are going to illustrate it. Decide what characters, background and props are necessary to express your idea. Then, on typewriter paper, make a great many trial pencil sketches 5-1/2 inches wide by 4-1/2 inches high. In them arrange the elements in as many different ways as possible until you come up with a composition that tells your story well.

In this planning stage do not concern yourself with details of figures, props or backgrounds. Merely sketch the general size, shape and action of each figure. Concentrate on placing the figures in the proper relationship to one another and to the props and background. If you use balloons with dialogue, they too, are important elements and their placement should be planned just as carefully as that of the other objects in the drawing.

The assignment you are to mail to the School for criticism

The cartoon editor of the local paper needs a one-panel black-and-white line cartoon. He likes your work and trusts you to come up with something fresh and interesting to his readers. The job will be reproduced 5-1/2 inches wide and 4-1/2 inches high. Your original should be scaled at least "twice up" and be able to reduce to your editor's exact specifications. (Aha -- remember that page on "Scaling" in the Introduction you skipped by so lightly? Take another look!)

You happen to know that the subject matter this editor really likes is either (A) summer vacations, or (B) local sports items. Pick either subject -- keeping in mind that future jobs will depend on your performance on this one. Be sure your cartoon idea explains itself to the readers. If it does not, you should furnish a caption, a headline or balloons.

Select the best one of the composition sketches you did for the practice assignment and work it up into a finished cartoon. Finish it in ink with neatly ruled panel borders ready for the engraver.

When we criticize your cartoon, we will look to see how good your idea is, how well the composition emphasizes the idea and how well the entire picture is balanced.

Present your assignment in the same clean, professional manner you would use if you were submitting it to the cartoon buyer of a publication. Letter your name, address and student number carefully in the lower left-hand corner of the page. In the lower right corner, place the Lesson Number. Mail to:

FAMOUS ARTISTS CARTOON COURSE  
Westport, Connecticut



**Famous Artists Cartoon Course**  
Westport, Connecticut

**Form**

Lesson

**12**

Rube Goldberg

Milton Caniff

Al Capp

Harry Haenigsen

Willard Mullin

Gurney Williams

Dick Cavalli

Whitney Darrow, Jr.

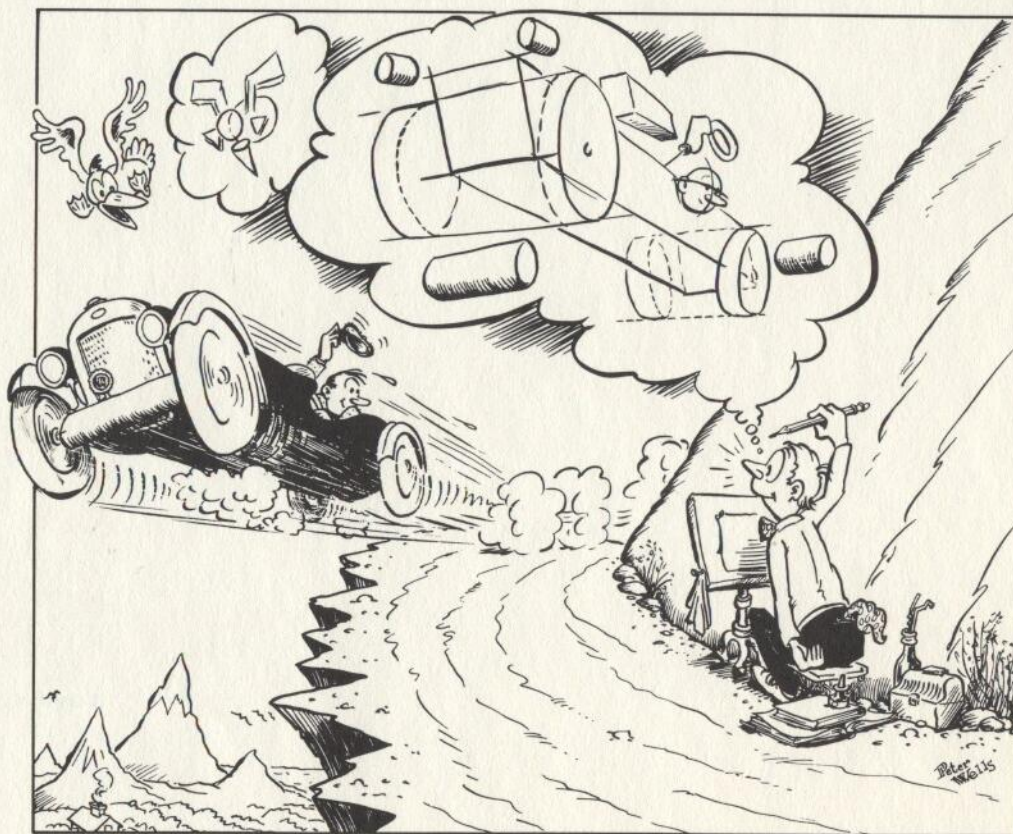
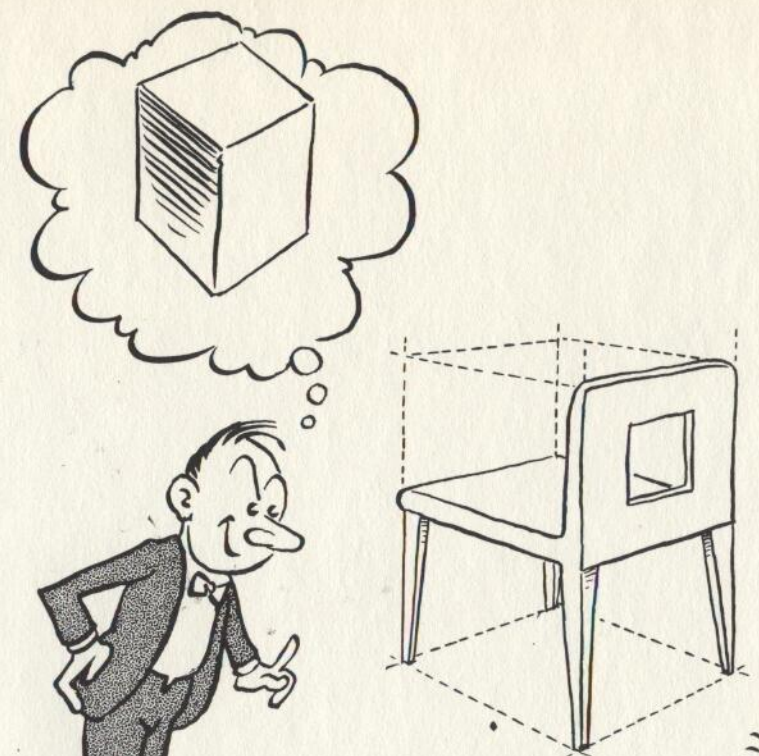
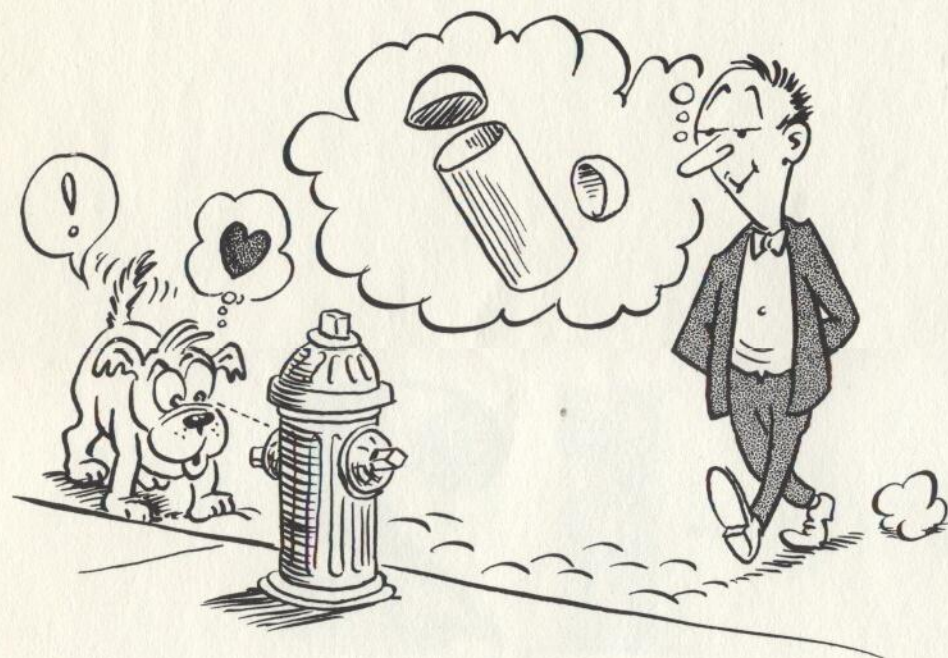
Virgil Partch

Barney Tobey



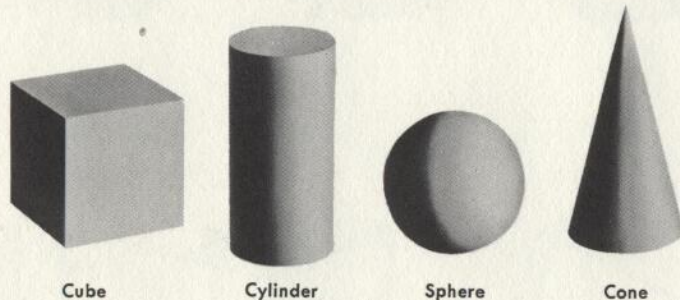
## Learning to see

As a cartoonist, you must train your eye to see more than an object's general shape and details. Your eye must penetrate to the **BASIC STRUCTURAL FORMS**. Your eye must *see*; your brain must *understand*. Once you know what the basic forms in an object are, it isn't hard to draw that object. *See, understand, and remember* basic forms.



Every time you open your eyes it gives you a chance to practice seeing basic forms. Start looking for basic forms now





## Form

Everything, from the world we stand on to the latest model automobile, is made up of one or more of the four basic forms; the cube, sphere, cylinder and cone. Because there are only four, it makes the job of learning to draw very simple. It is easy to see that if you can draw a cube, you can draw a box; and if you can draw a cylinder, you can draw a top hat or a hunk of sewer pipe.

The most important thing in learning to draw is learning to *see*. The average person looks at a house and sees it as a white or red house, with or without a nice yard. In other words, they are seeing it only from the outside. They are not concerned with the basic form of it. The cartoonist, looking at the same house, and planning to draw it, must see below the surface to the basic form. He sees not a pretty little cottage, but a large cube with a small cube coming out of the side. If it has a peaked roof, he knows that the roof is a cone, cut in half and placed on top of other cubes. The color, grass, trees and windows are details that he will take care of after he has the basic form of the building well established on his drawing paper.

There are only four basic forms and none of them is hard to draw. A child can learn to draw all of them in a short time. Of course, there are very few objects that are made up of only one of the basic forms. Most of the things we see around us are made up of two, three or all of the four forms combined into one object. When looking at an object you are going to draw, it is important first to pick out the basic forms, and then to determine their relation to each other in respect to size and direction. Once you have established these points and have transferred them to your paper, you can go ahead with the detail, confident that your drawing is structurally sound. Thinking in the basic

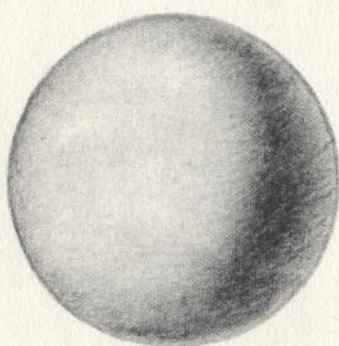
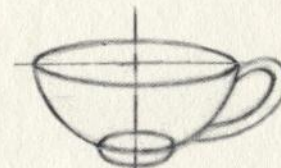
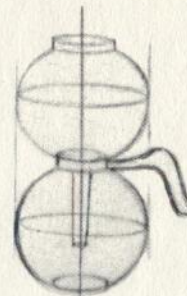
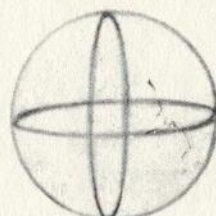
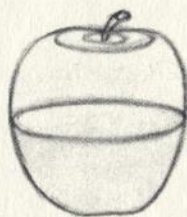
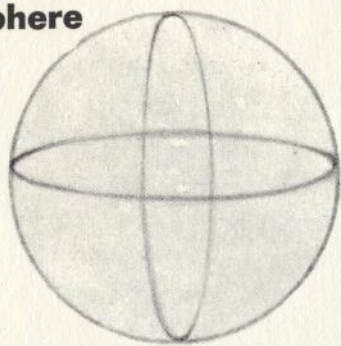
form helps you to work for simplicity, and simplicity is one of the basic requirements of cartooning. If you can develop the habit of thinking in basic forms, you will have conquered not only the structural method of drawing, but you will also have helped yourself along the road to successful cartooning.

Too many beginners in cartooning start out with the idea that all they have to do is learn how to cartoon the human form. They forget that the human form must be surrounded by objects, which must also be drawn. It is very true that some of the work you see in national magazines and newspapers looks as if the cartoonist just threw a few careless lines in the background to represent a table or chair. Simplicity is a great part of cartooning, but don't let the simplicity of the professional fool you. To be able to draw a table or any object with a few lines, the artist had to be doubly sure that his basic form was right. The fewer lines you use to draw a form, the more correct those lines must be.

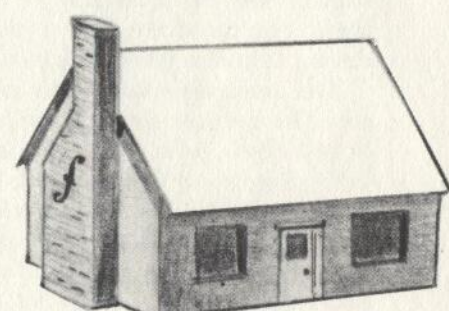
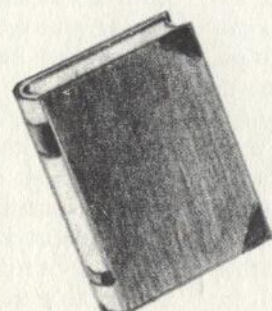
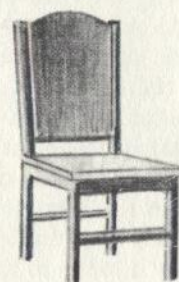
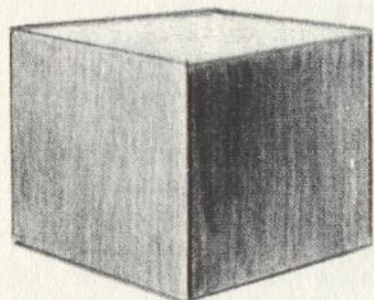
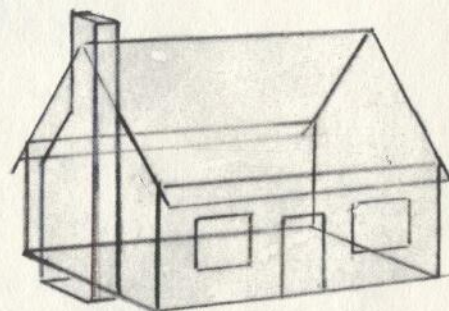
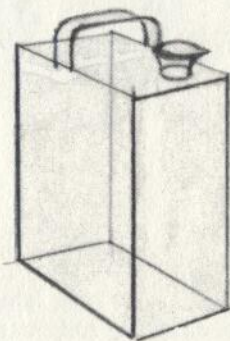
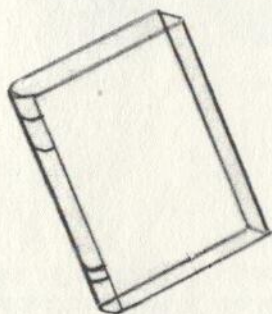
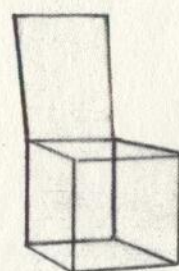
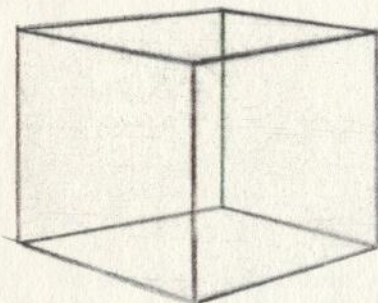
When you go out for a walk or a ride, be sure to carry that sketch pad with you. Form the habit of making quick, small sketches of objects. Break them down to their basic form; don't try to finish them off in detail. Draw everything — the fireplug on the corner and the box full of broken bottles out in back of Mrs. Murphy's house. If you limit yourself to only a few moments for each sketch, you will automatically simplify — and to simplify you *must* use basic forms. If you don't feel like going for a walk or a ride, stick around the house. In your own living room are tables, chairs, lamps, television sets, pots and pans — all of the many things that you as a cartoonist must be able to draw.



## Sphere



## Cube



Every object in existence can be reduced either to a sphere, a cube, a cone, a cylinder — or some combination of these basic forms. If you remember this fact constantly, and approach your subject matter from this point of view, you will have no difficulty in drawing any object you can see or imagine.

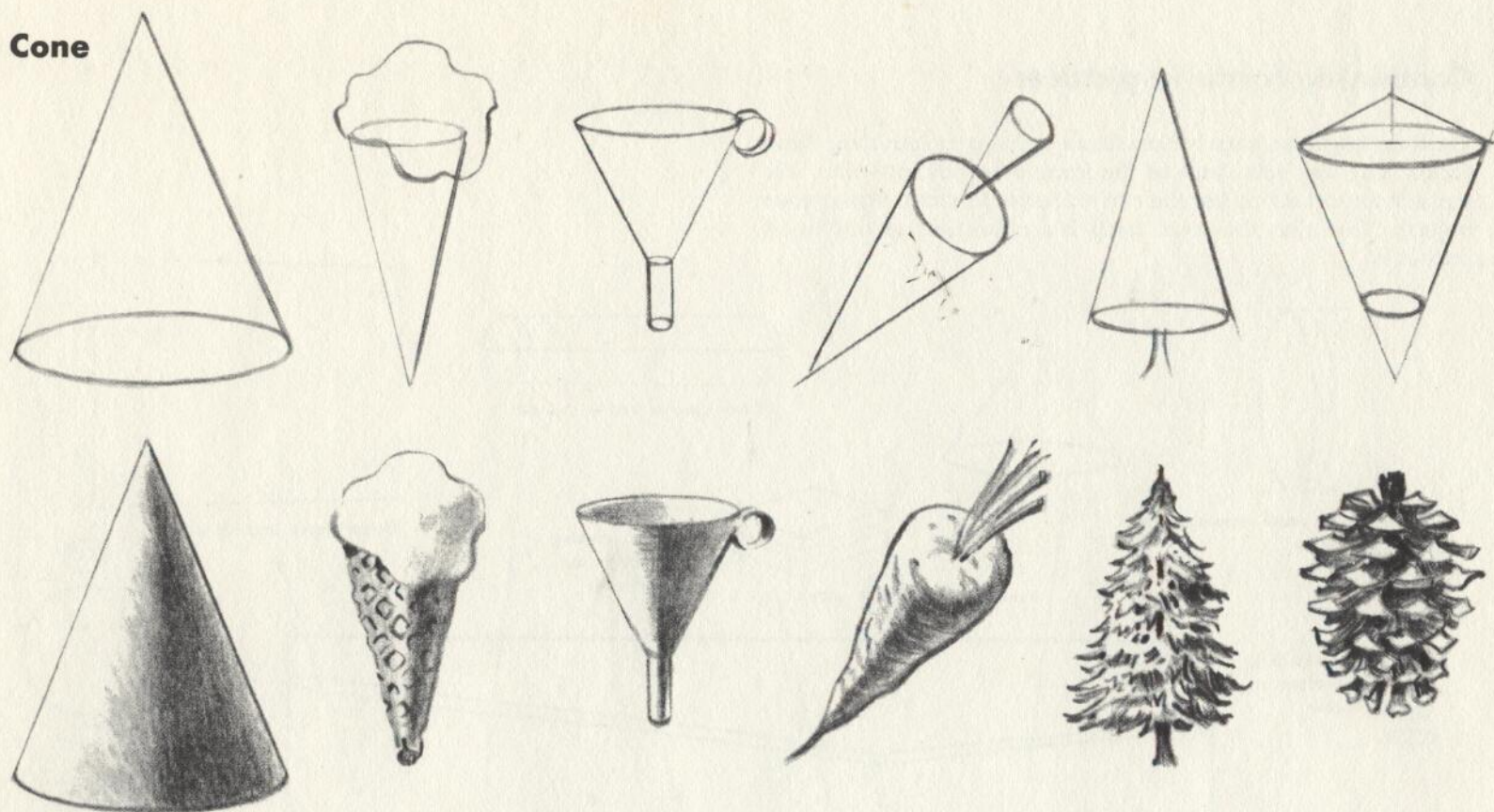
These pages contain paired rows of drawings. In each pair the lower, finished drawing, complete with detail and tone, shows you *what your eye sees* when you look at the actual object in nature. Immediately above this finished drawing is a "con-

struction drawing" of the same object. This construction drawing reduces the object to its *simple basic form* with all the non-essentials stripped away. Study these pairs of drawings, and then look around you. You will realize immediately that every object in sight, no matter how complicated it may seem at first glance, can easily be reduced to a sphere, a cube, a cone, a cylinder, or some combination of these.

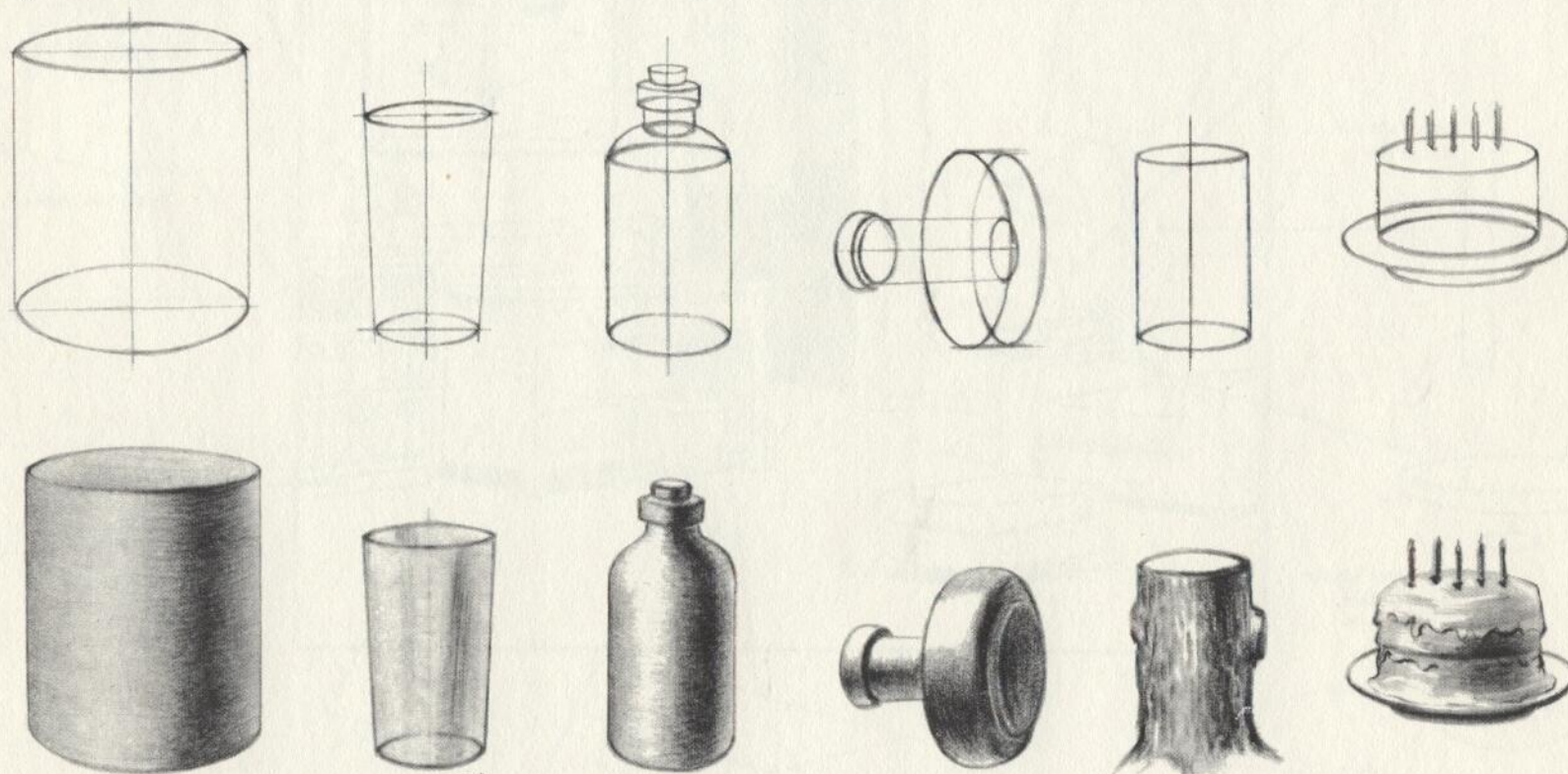
When you look at your radio, for instance, what do you see? You may be tempted to notice first the dial, then the knobs, the



## Cone



## Cylinder



speaker grille, the polished grain of the wooden cabinet, the shadow on one side, the high light on the other, and so on. But if you look at an object in this way, seeing the unimportant parts and surface details, *you'll never be able to draw it convincingly.* Look back at your radio. It's a simple basic cube form, isn't it? All the other factors are comparatively unimportant. *After you have drawn through the basic form,* you can easily spot the details in the exact places where they belong.

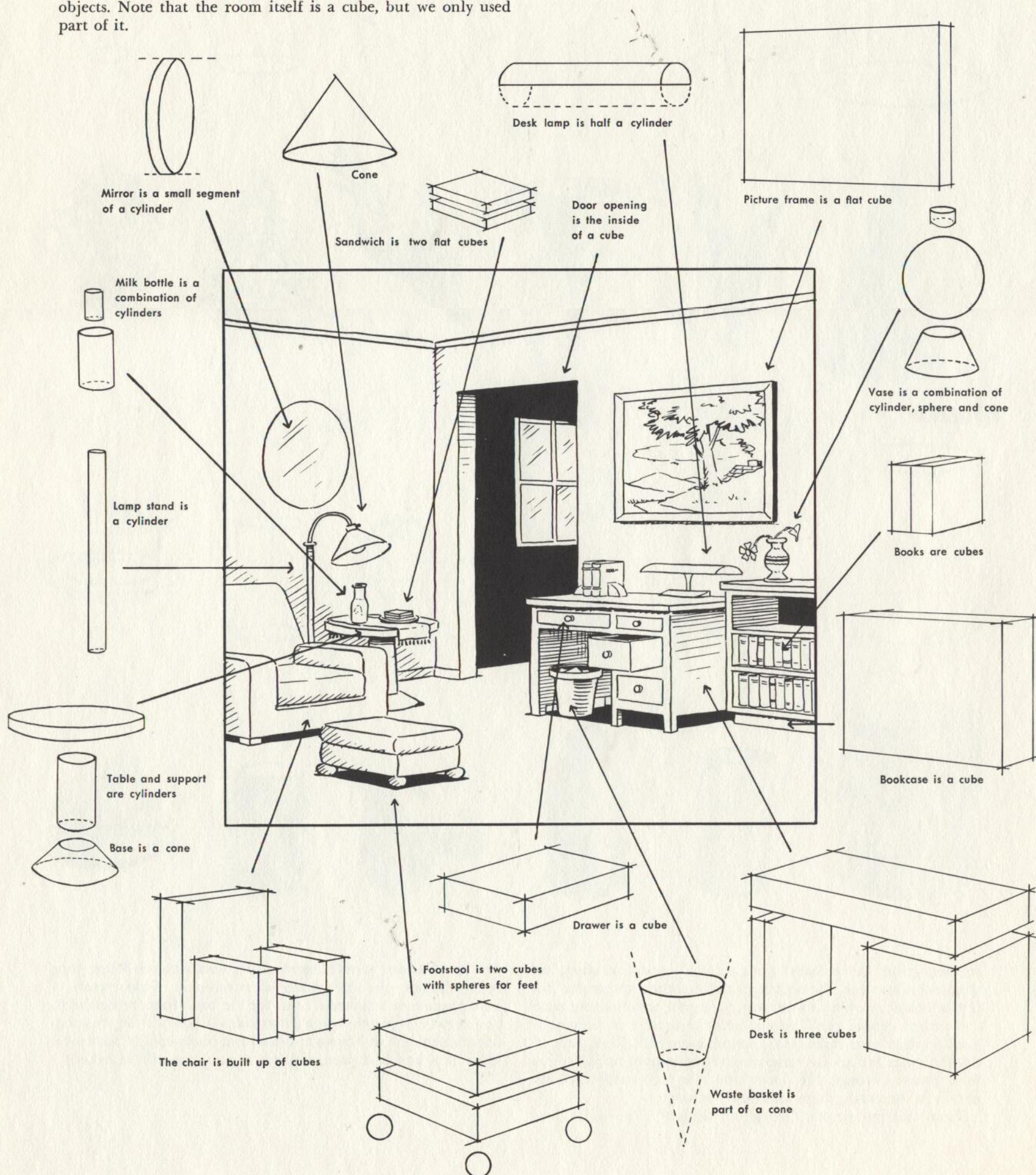
From this minute on, throughout the rest of your life, *look*

*first for the basic form of every object which comes before your eyes, whether you are staring at a radio or a rhinoceros, a pomegranate or a princess. Look for the basic form, recognize it, and draw it through to the other side. If you will do this conscientiously, you will learn to draw form convincingly before you know it — and half your problem as an artist will be licked!*

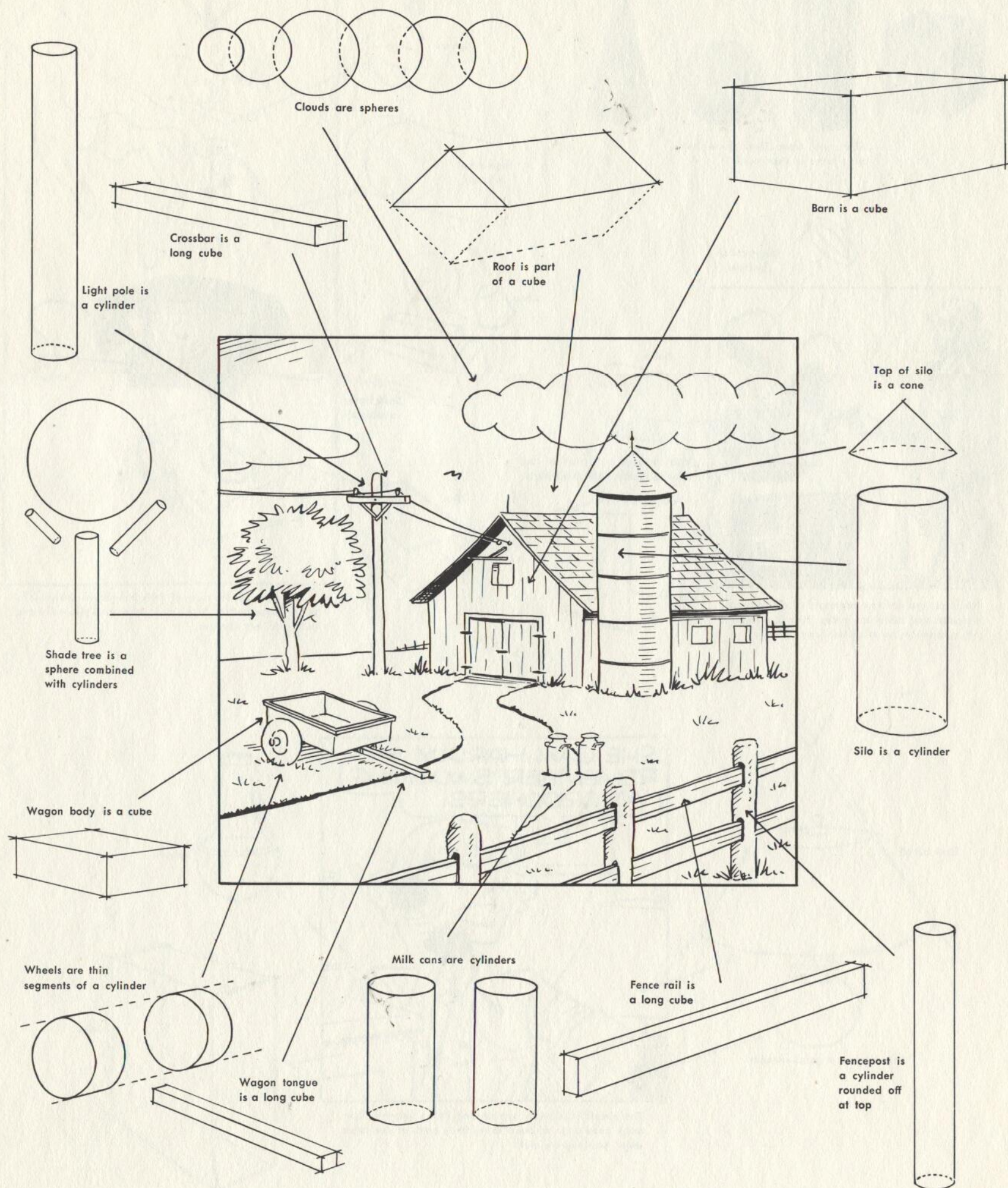


## Combining forms in pictures

On these pages we have broken down the objects into their basic forms. The way you combine the forms is important — but it is equally important to use the *correct* forms in constructing your objects. Note that the room itself is a cube, but we only used part of it.

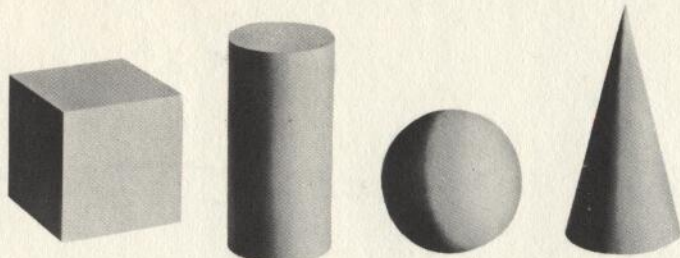




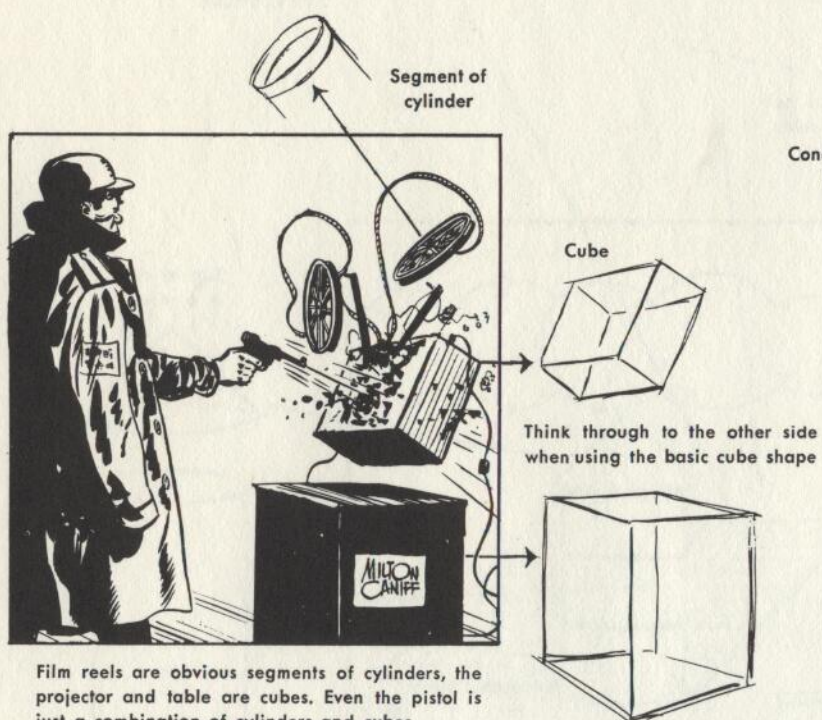




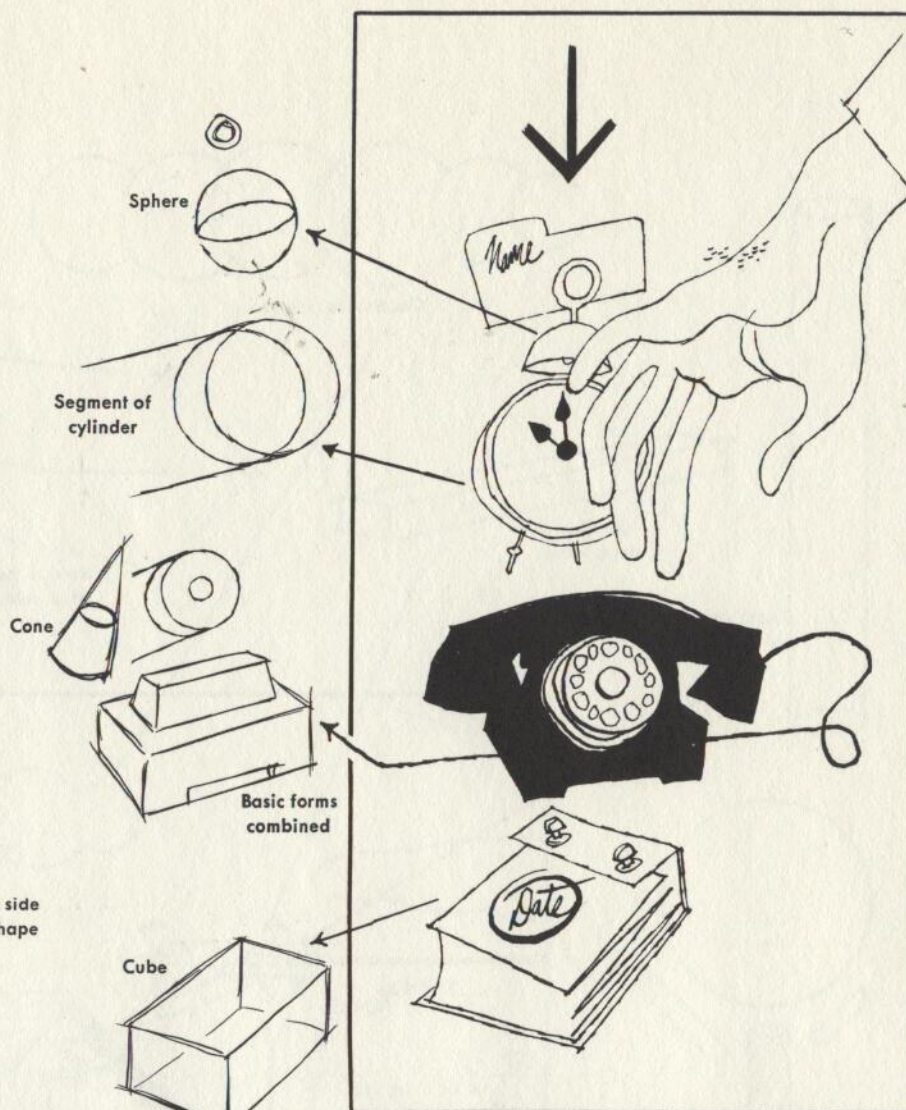
## Remember your basic forms



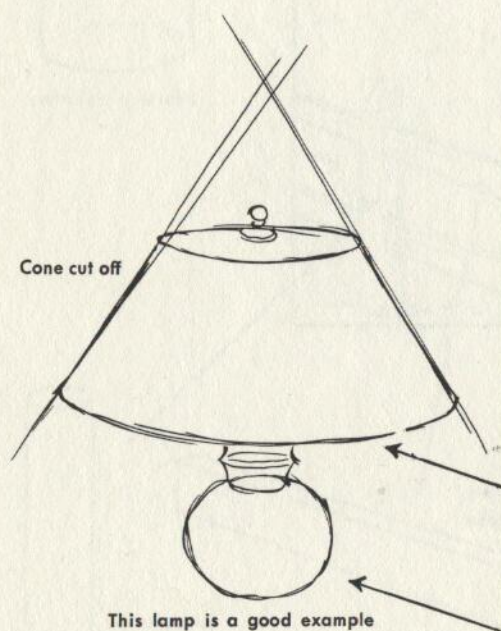
When you draw, keep these four basic forms in your mind



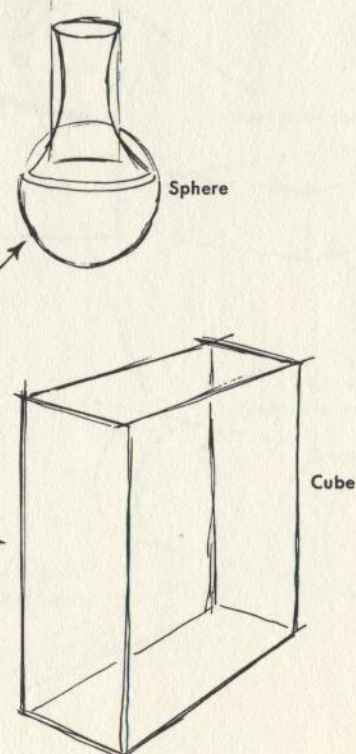
Film reels are obvious segments of cylinders, the projector and table are cubes. Even the pistol is just a combination of cylinders and cubes



In this example the rules of form have been stretched to get a modern effect. Study and understand the real forms before taking liberties



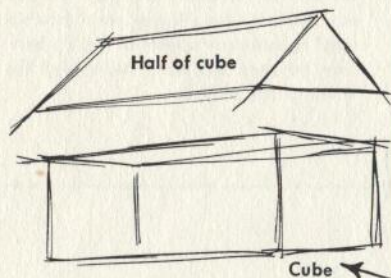
The simplified scenery surrounding Penny shows a thorough knowledge of basic form. Only parts of the forms show, but they are right







A sphere is not flat — its surface goes all the way around it

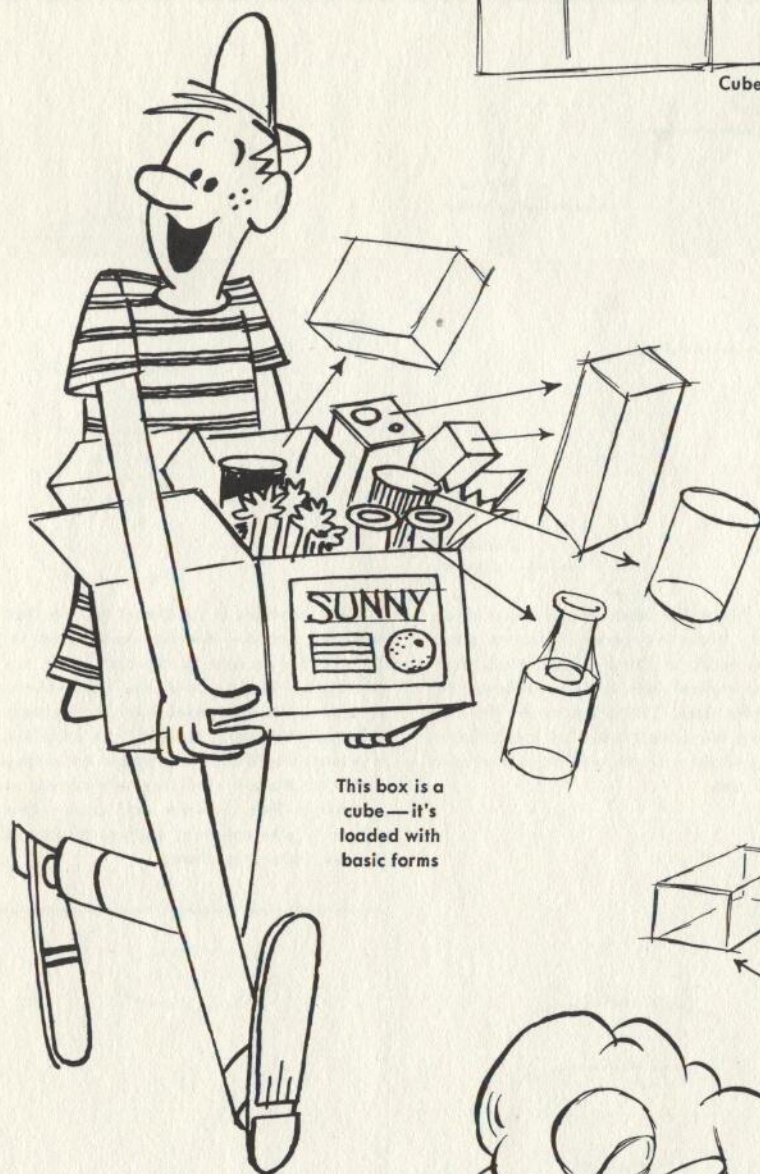


Half of cube

Cube

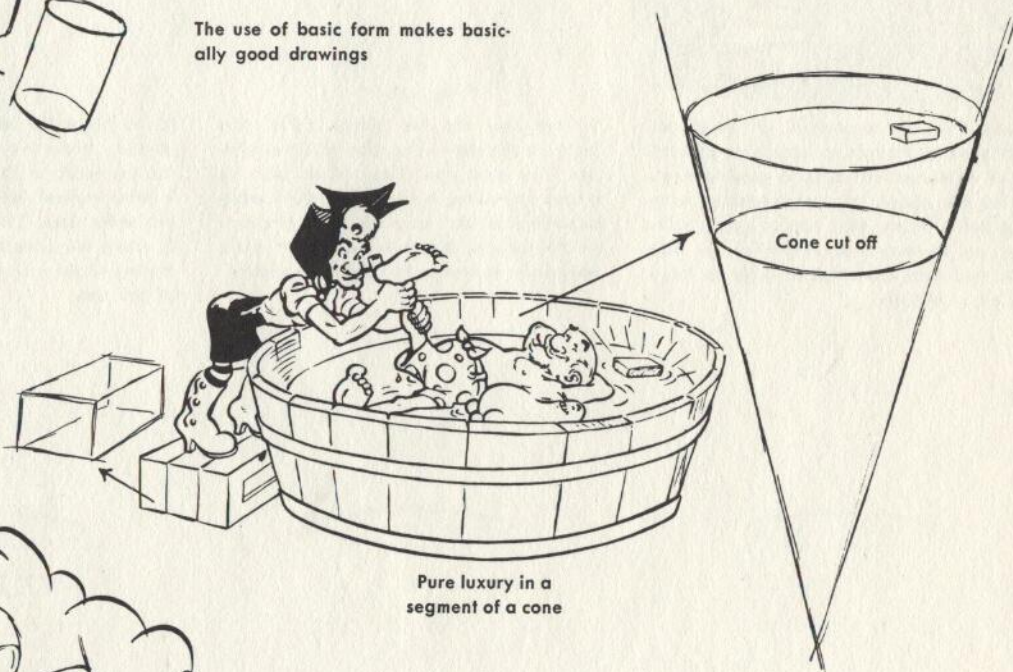


The bandage on the sphere goes around its surface beautifully. The simple log cabin is a cube form with a half-cube for a roof



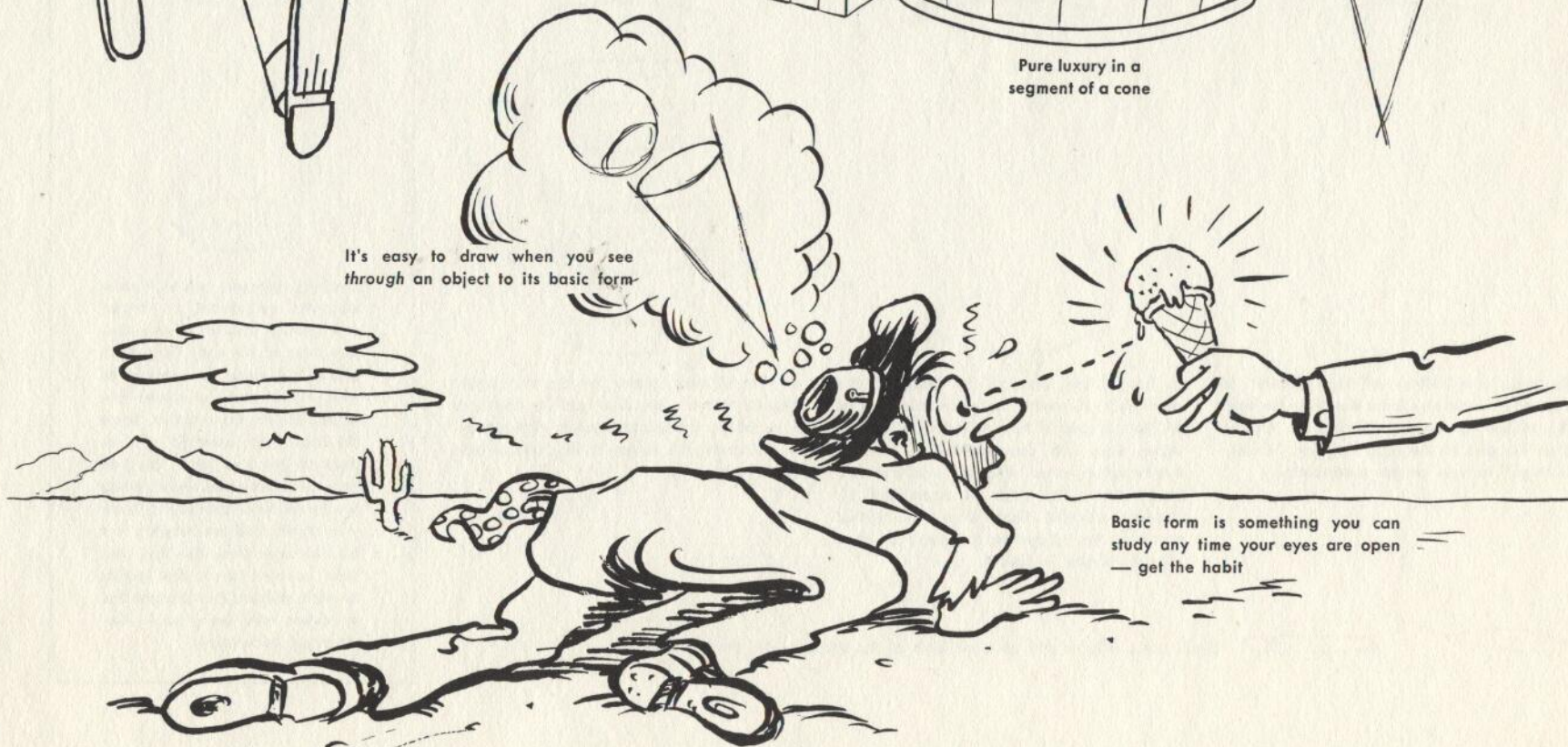
This box is a cube—it's loaded with basic forms

The use of basic form makes basically good drawings



Pure luxury in a segment of a cone

It's easy to draw when you see through an object to its basic form

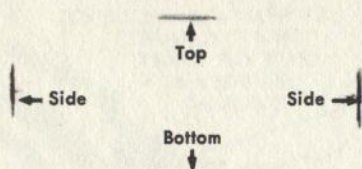


Basic form is something you can study any time your eyes are open — get the habit

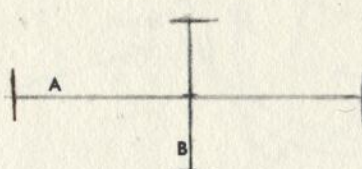


**Use mechanical  
aids to draw  
symmetrical  
forms**

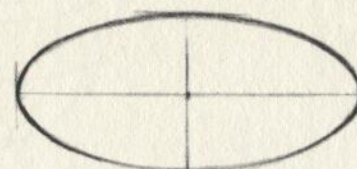
**One way to draw an ellipse**



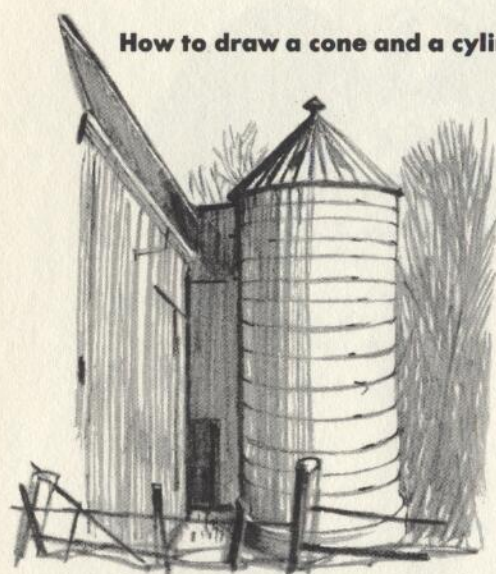
1. Indicate the width of your intended ellipse with two short vertical lines and, with two short horizontal lines, indicate its thickness.



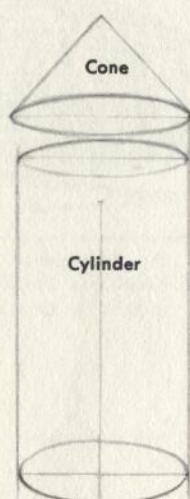
2. Using your T square, draw a horizontal line (A) halfway between the top and bottom lines. Using your triangle and T square draw a vertical line (B) halfway between the lines indicating the width of the ellipse.



3. Now connect the four points of intersection where lines A and B cross the lines indicating the width and thickness of your ellipse. The connecting line should be a smoothly flowing curve and each of the four quarters of the resulting ellipse should be of the same size and shape.

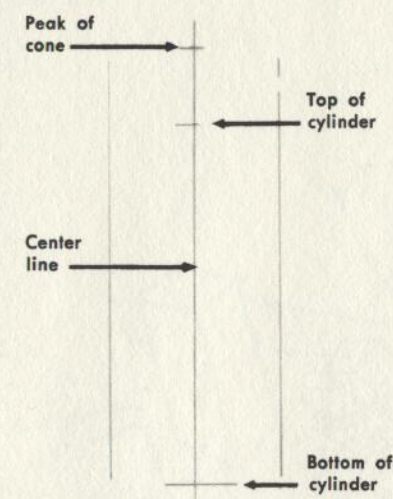


**How to draw a cone and a cylinder**

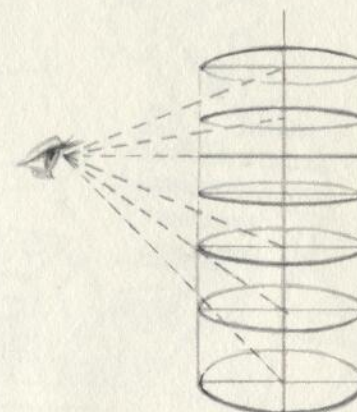


Many times in commercial art work, you will have to draw forms consisting primarily of cones and cylinders. A good example is the silo above. It is constructed of nothing but a simple cone and a simple cylinder, but to draw a convincing picture of a silo, you must know how to draw the basic forms accurately

1. Here are the two simple forms that make up the silo — the cone and the cylinder. The eye level line, which can be placed anywhere, is located approximately two-thirds of the way up the cylindrical part of the silo. This is the level from which objects are viewed in this particular picture



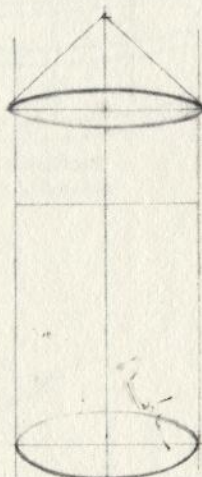
2. To place the elements of the silo accurately, draw two vertical lines to establish the width of the structure. Next, draw a third vertical line halfway between the two width lines. This is the center line. On it, mark the lowest point of the cylinder, the top of the cylinder and the top or apex of the cone



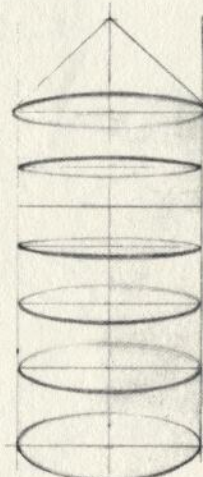
3. Now consider a number of ellipses that must be drawn — the top and bottom of the cylinder as well as the iron bands encircling the silo. As an ellipse moves above or below the eye level line its thickness changes. The farther from the eye level line it moves, the thicker it appears. An ellipse drawn on the eye level line will appear as a straight line. Practice and observation will help you construct ellipses of logical and accurate proportions



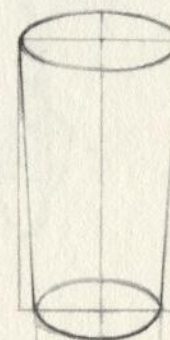
4. Since the bottom of the cylinder is farther from the eye level line than the top, the ellipse at the bottom will be thicker than the one at the top. They are "drawn through" in their proper proportions



5. The ellipse forming the base of the cone while of nearly the same thickness as the top ellipse of the cylinder, is a trifle wider since the actual silo top has an overhanging eave. When this ellipse has been drawn the cone is completed by drawing straight lines from the widest points of the ellipse to the peak or apex already located in Step 2



6. The ellipses formed by the iron bands around the silo are next put in. Each one is carefully constructed and is of the proper thickness with regard to its distance from the eye level line



Drinking glasses, while fundamentally cylindrical in shape, are usually smaller at the bottom than at the top. To draw a glass, first place your maximum width lines and the center line as you did for the cylinder. Draw the top ellipse carefully with regard to the eye level line you have decided upon. Next, using the center line to place it, draw your bottom ellipse making it a bit narrower than the top one. Then connect the widest points on each ellipse by a straight line as shown and the glass is convincingly constructed



Don't make ellipses with pointed ends or flat ellipses with circular ends



FAMOUS ARTISTS CARTOON COURSE  
Student Work  
Lesson 12

To study and practice

This lesson teaches you to look at things in a new way. One of the best habits that you, as a cartoonist, can get into is to look for and draw the four basic forms. Breaking things down into their simplest forms is the cartoonist's job. Sphere, cube, cone and cylinder -- everything under the sun is just one or a combination of these basic forms. Understand this, and half your problems of drawing are licked.

Practice seeing and drawing through objects. Sketch the things that surround you at home and see how the four basic forms combine to make them. Omit details when you do this, drawing the basic forms only. Try half-squinting when you look: this eliminates a lot of detail from your eyes. For added practice, put tracing paper over magazine photos and draw on it the basic forms of the objects pictured underneath.

We will criticize and grade your assignment on how well you draw and understand the use of the four basic forms in your work.

The assignment you are to mail to the School for criticism

On a sheet of 11 x 14-inch Bristol board, measure off a panel 8 inches high and 10 inches wide. Inside it, draw in the foreground a sidewalk with a fire-plug. In the street there is an oil tank truck (three-quarter side view) with a flat front tire. The driver is looking at it. There is a city sky line in the background. This is the basic scene -- you may add any other props or characters you wish -- but remember to use the basic forms to construct the drawing. Finish this assignment in ink.

Present your assignment in the same clean, professional manner you would use if you were submitting it to the cartoon buyer of a publication. Letter your name, address and student number in the lower left-hand corner of the page. In the lower right corner, place the Lesson Number. Mail to:

FAMOUS ARTISTS CARTOON COURSE  
Westport, Connecticut

BE SURE to fill out the return shipping label and enclose it with your assignment. This helps a lot in getting your assignment back quickly.



**Famous Artists Cartoon Course**

**Westport, Connecticut**

# **Perspective**

Lesson

# **13**

Rube Goldberg

Milton Caniff

Al Capp

Harry Haenigsen

Willard Mullin

Gurney Williams

Dick Cavalli

Whitney Darrow, Jr.

Virgil Partch

Barney Tobey





Everything appears smaller as it gets further away and parallel lines meet at a point on the horizon. This is called the vanishing point



## Perspective for a cartoonist

So far you have learned that an understanding of form and depth is very important to every cartoonist, whether he draws in a realistic way or stylizes his work to the wildest extreme.

Now we are going to show you how a knowledge of *perspective* will help you actually create and control the sense of depth in your cartoons. The few simple principles of perspective which you should know are easy to understand. There is nothing complicated about them. Just apply these principles to the things you see around you and you will soon learn all you need to know to draw cartoons that have a real sense of form and depth.

All the rules of perspective are based on one simple observation. *Objects appear to become smaller as they are farther from your eyes.* Everything conforms to this principle. The picture on the opposite page shows a succession of things getting smaller and smaller until they vanish. Since each object appears smaller as it is farther from the eye, *any part* of an object also seems smaller. The height, width and thickness of each form decreases proportionately. See this for yourself by looking down a street lined with houses, trees and telephone poles. Each part of the house seems smaller as the house is farther away, the thickness of the poles decreases along with their height, as does the size of the trunks and the branches of the trees.

As these objects and their parts seem to decrease, the *distance or interval between them also seems smaller.* Now, as you see this apparent decrease of size with distance, you become aware that the objects diminish in an obvious direction toward a definite level or height in the picture. This level is known as the *horizon* or *eye level*.

The level at which sky and earth meet is the most common form of natural horizon but it is not always the level of the *true* horizon. The true horizon is always the level of your own eyes and will change each time you move to a higher or lower position. The true horizon is straight out in front of your eyes and on a level with them if you look straight ahead without moving your head up or down. Wherever sky and water meet you see a true horizon. If you stand in a room and your eyes are 5½ feet

from the floor, that height is your level and horizon for the room. Even though your view of a natural horizon is partly or completely blocked by a hill or building you should still be aware of the horizon in front of you.

Look at the picture opposite — it demonstrates another point. *Level parallel lines all appear to converge at a definite point. This point is called the vanishing point.* It is always on the horizon or eye level, though it may be at any point on that horizon. You can see this effect by looking down a street, a hall, a rug, a coffee table or a bowling alley. This convergence is easier to see in long lines, but remember that it takes place with *all* level parallel lines regardless of their length.

Drawing is just an interpretation of three-dimensional objects on a flat surface (your drawing paper). To give an object the feeling of solidity and depth, you use perspective. This, like mathematics, can become quite complicated, but for the average cartoonist the one-point or two-point systems of perspective will fill the bill nicely.

The most important object in teaching perspective is the cube, which will be the basis for most of our examples and diagrams. From the cube we can draw in perspective circles, ellipses, and even people and animals.

Most cartoonists draw objects free hand. They erase, change and work over a drawing until it *looks* right to the eye. It is only when the drawing continues to look wrong that they call on their knowledge of perspective to correct the mistake. It's an indispensable tool in your drawing kit.

All forms have perspective, not just chairs, tables, rooms and buildings. When drawing persons, trees, clouds or *anything* in nature, you will find that perspective is needed to make them look right.

Once you understand the few simple rules of drawing a cube in perspective, their application to other objects is relatively easy. In this lesson we shall explain and diagram these rules for you, using familiar objects and problems with which you are most likely to be confronted in your cartooning.

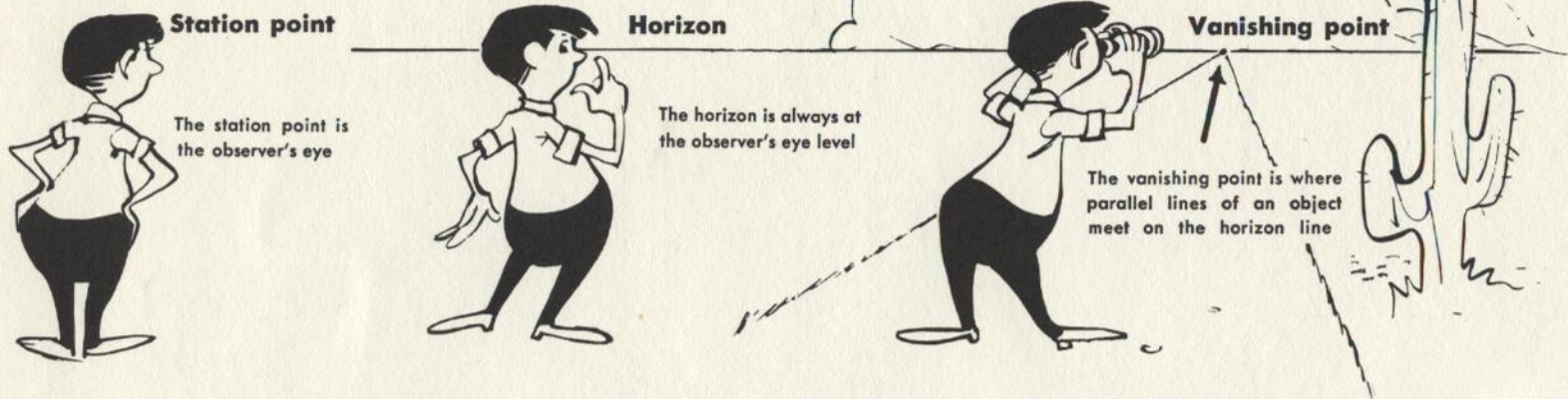


### Three musts of perspective

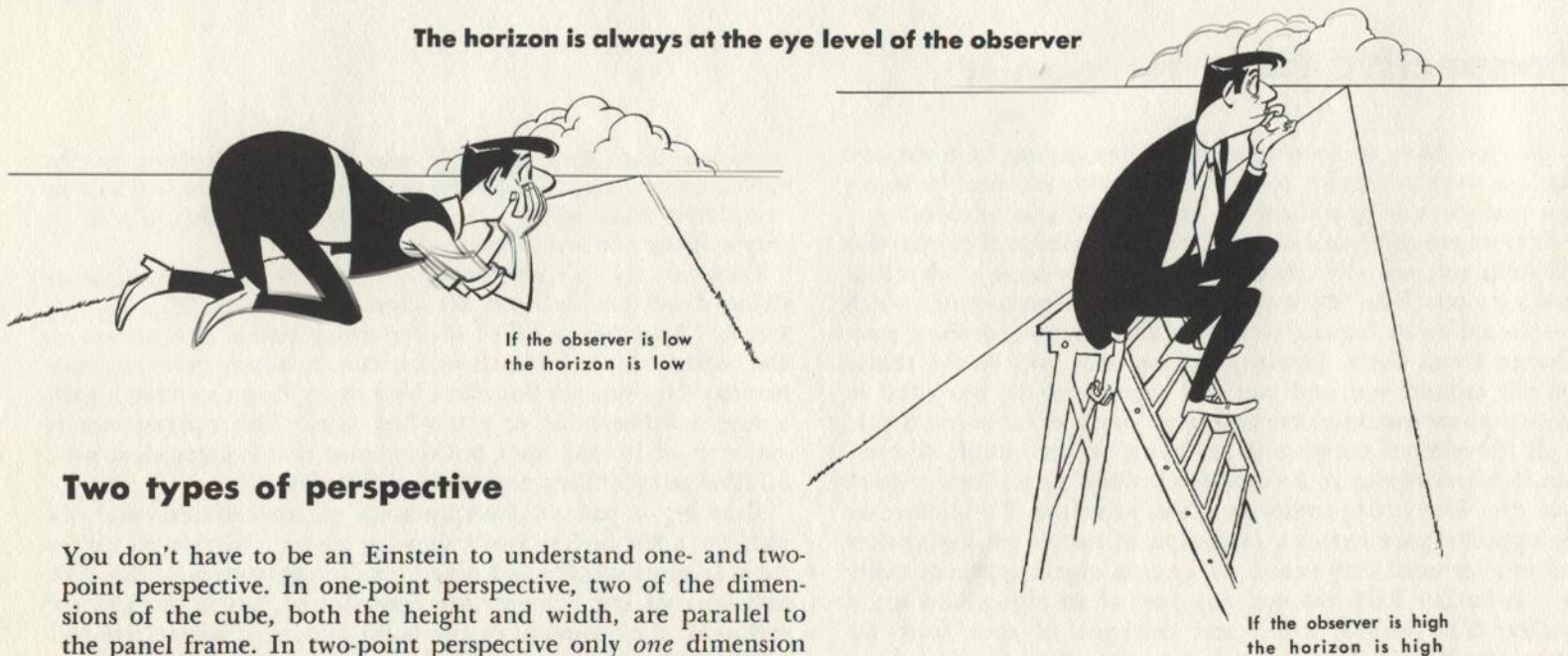
In perspective there are three basic things to remember: 1) the eye level or horizon; 2) the eye or station point; 3) the vanishing point.

The position of the eye of the observer is the station point. If the observer looks straight ahead, you have the eye level or horizon line. If a figure walks away from the observer and vanishes in the distance, you have the vanishing point. *The vanishing point is always on the eye level or horizon line.*

Fix these three things in your mind and you have the basis of all perspective.



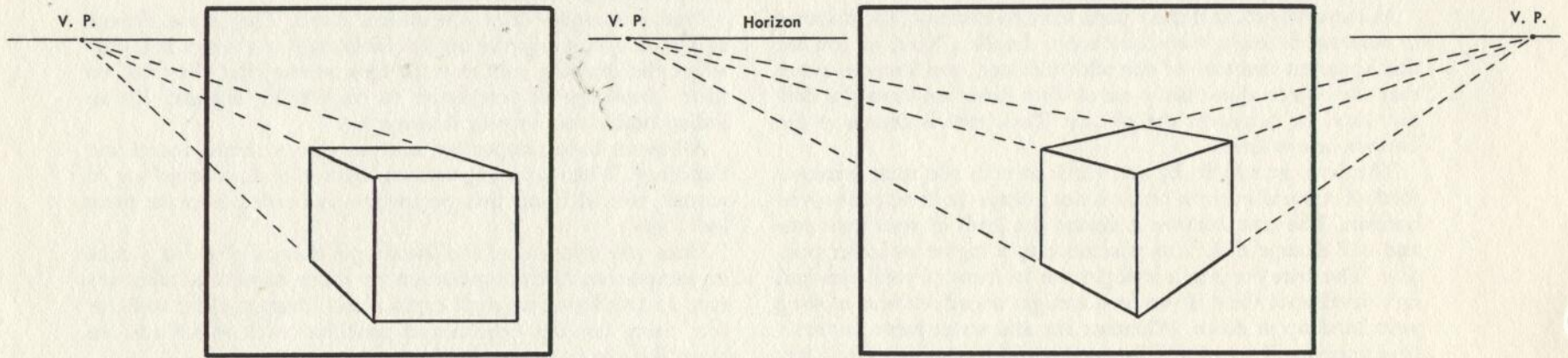
The horizon is always at the eye level of the observer



### Two types of perspective

You don't have to be an Einstein to understand one- and two-point perspective. In one-point perspective, two of the dimensions of the cube, both the height and width, are parallel to the panel frame. In two-point perspective only *one* dimension is parallel to the frame of your drawing — in other words, the perpendicular lines of your drawing are parallel to the sides of the frame.

**Note** — all vanishing points must be on the horizon line



#### One-point perspective

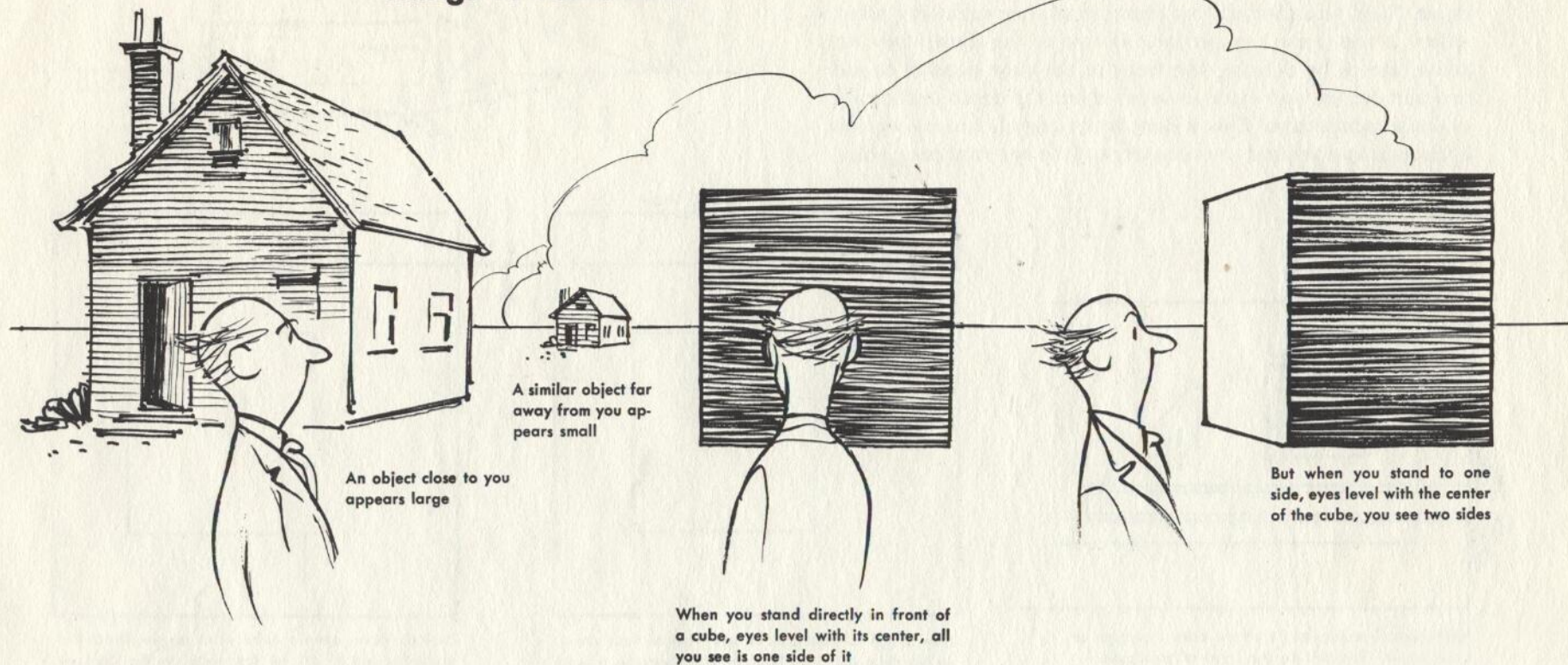
In one-point perspective there is only one vanishing point for all objects in the picture

#### Two-point perspective

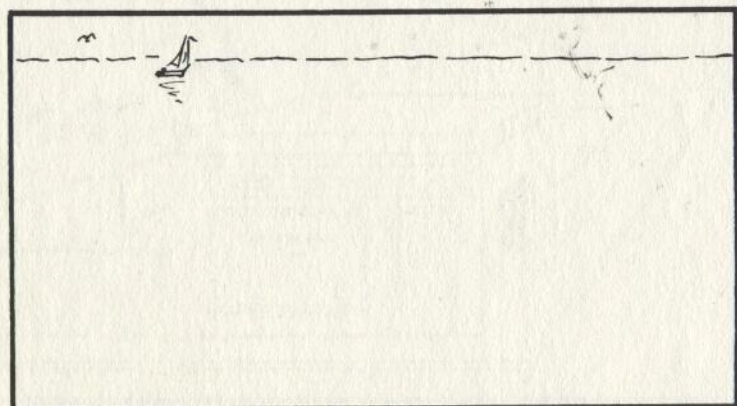
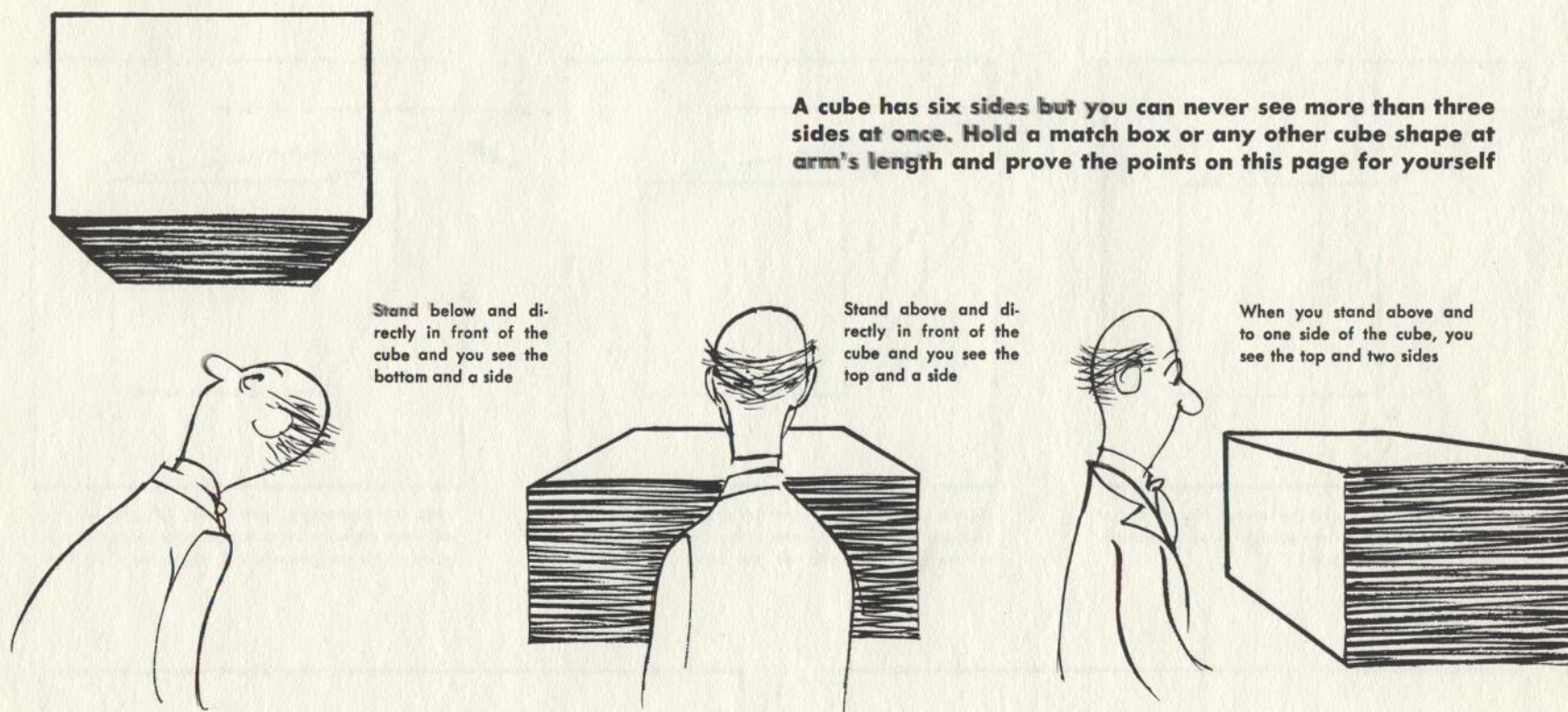
In two-point perspective each object in the picture has two vanishing points



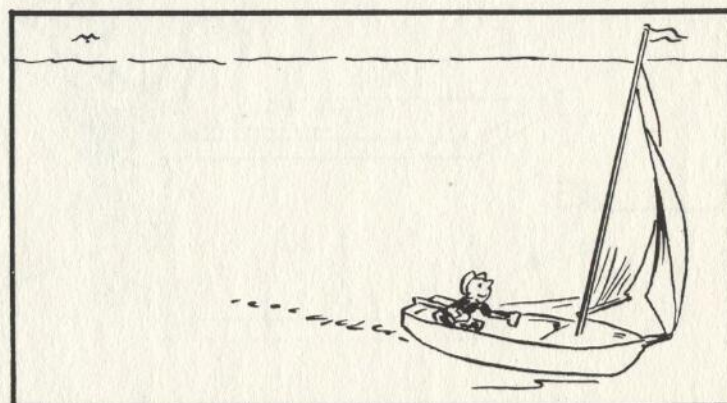
## Things to remember



A cube has six sides but you can never see more than three sides at once. Hold a match box or any other cube shape at arm's length and prove the points on this page for yourself



An object small and high in the panel appears to be in the distance

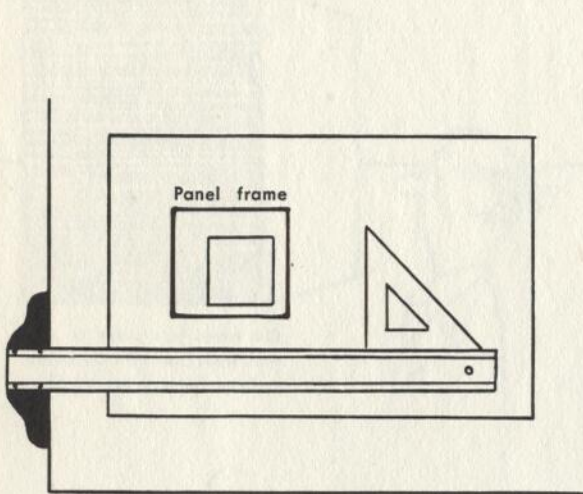
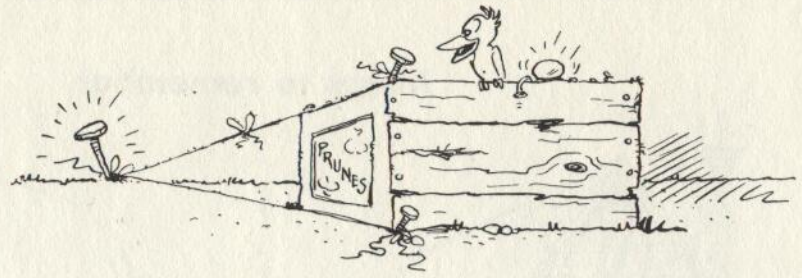


An object large and low in the panel appears to be near

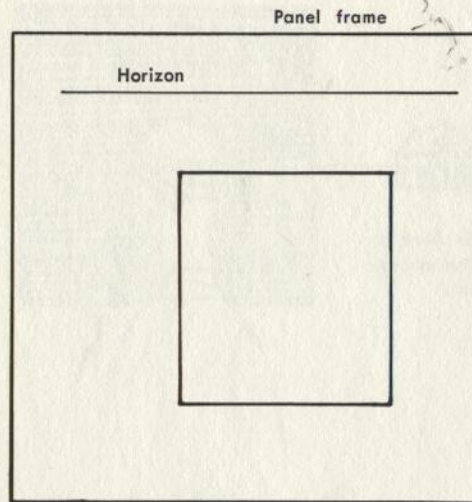


## Drawing the cube in one-point perspective

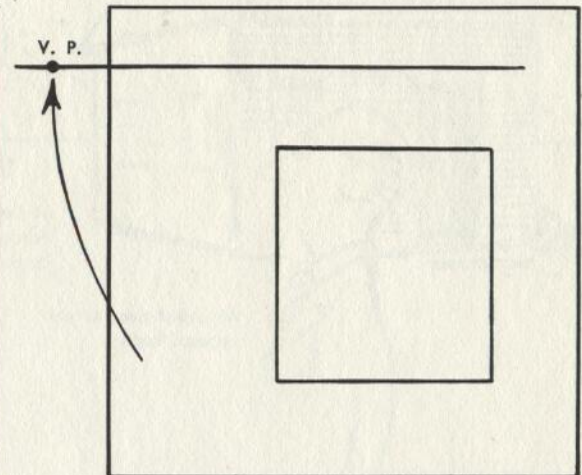
First we will take up one-point perspective. In the diagrams and pictures below you will see that two of the dimensions of the cube, the height and width, are parallel to the panel or picture frame. This, plus the fact that there is only one vanishing point, makes it one-point perspective. As two of the dimensions are taken care of by drawing the front of the cube parallel to our panel frame, we only have to worry about the depth of the cube to create perspective. This is done by having all lines except the horizontal and vertical lines converge at the one vanishing point.



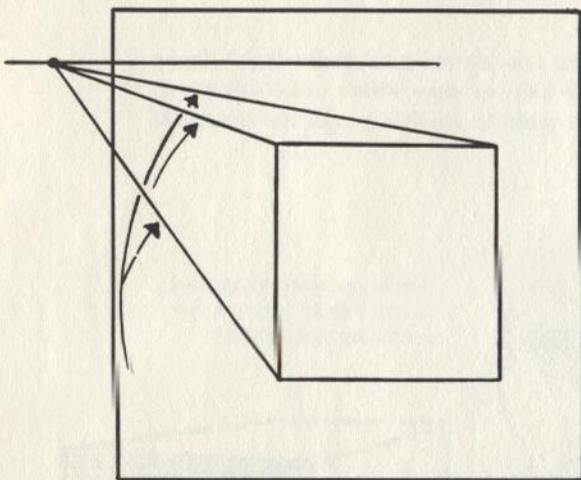
With your T-square and triangle draw a square on your paper. This will be the front of your cube



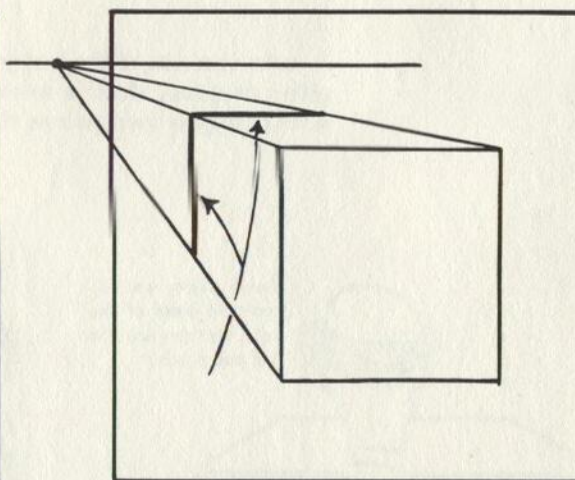
Now locate the horizon. If you want to look down on the cube, place the horizon high above the square



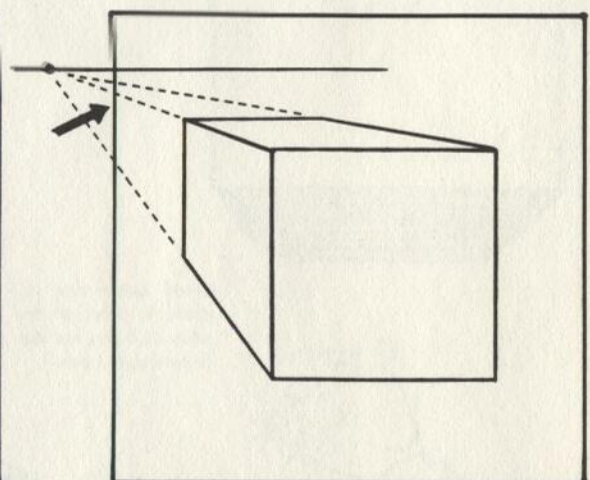
To look down upon a cube at an angle locate the vanishing point off to the side on the horizon



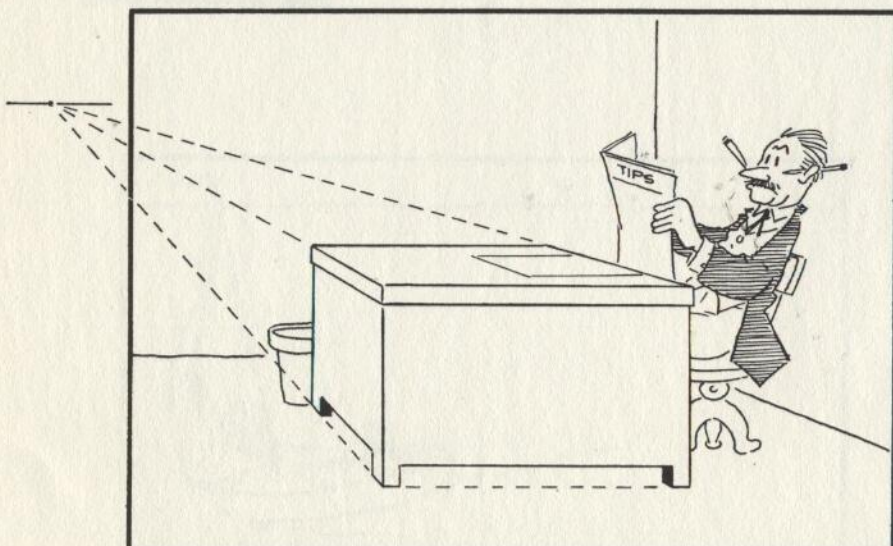
From the three corners of the square closest to the vanishing point draw three straight lines to connect them to the vanishing point



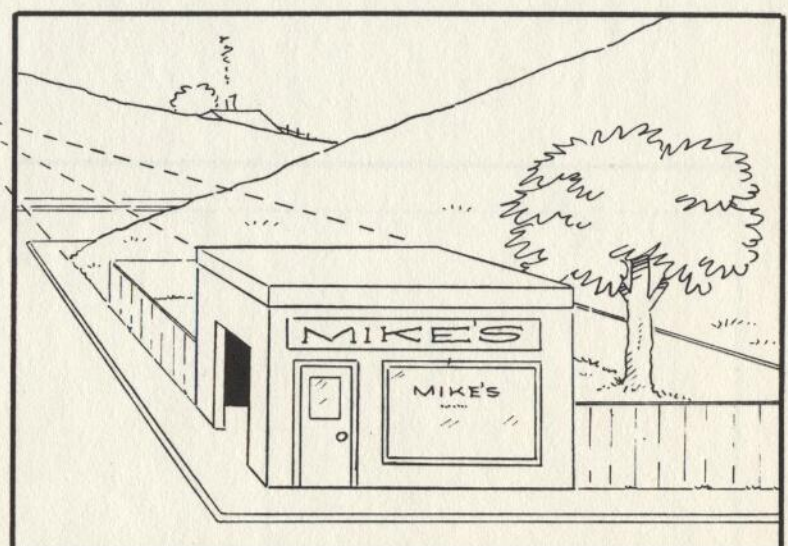
Decide how deep you want the cube, then, with the T-square and triangle, draw in the two lines parallel to the top and side of the square as shown



Erase the connecting lines to the V.P. and see that you have drawn a cube. For practice change the location of the horizon and V.P. and draw a few more



With the cube drawn in one-point perspective, we can use it to create a desk and an interior scene

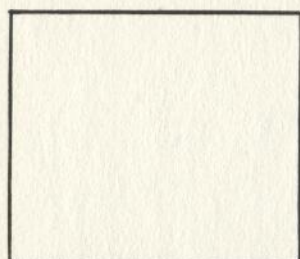


Or using the same cube we can draw an outside scene using the cube to draw a building

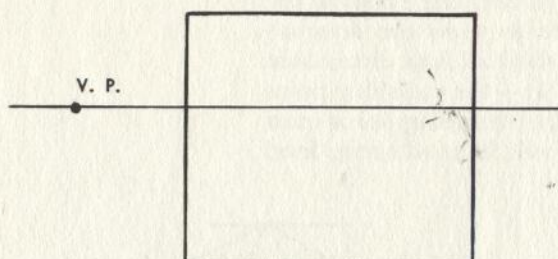


## Drawing the inside of the cube

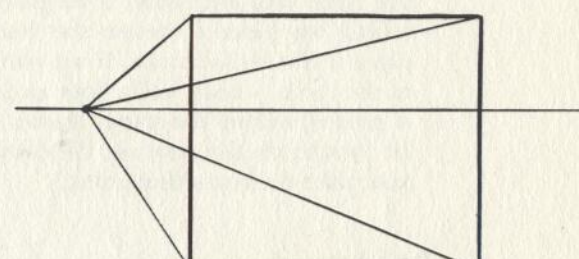
Rooms in a house or building are cubes, so you should know how to draw the inside of the cube as well as the outside.



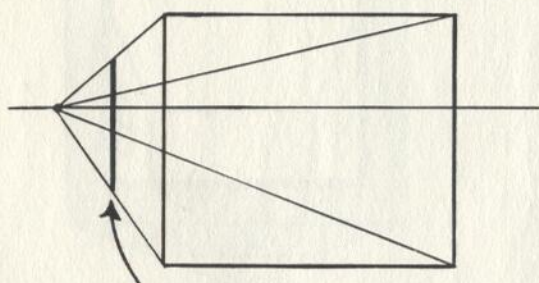
You first draw the front end of the cube to the size of the cube you want



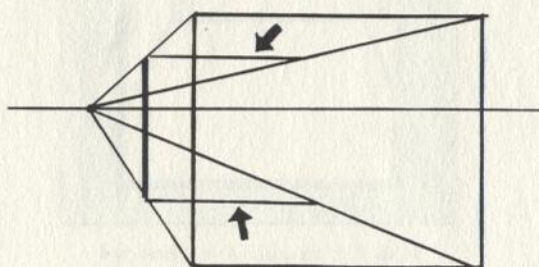
Locate the horizon and V.P. The closer the V.P. is to the cube, the more of the inside of the cube will show



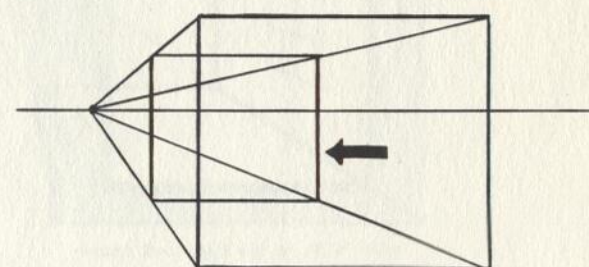
Now you may connect all four corners of the cube to the vanishing point



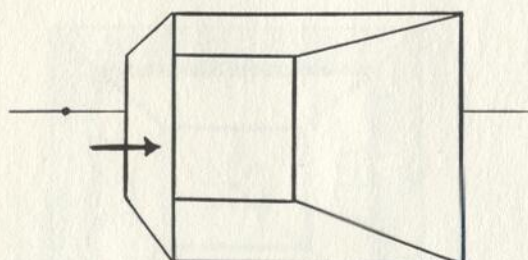
Decide how deep the cube is to be and with a vertical line as shown, draw the outside of the rear corner



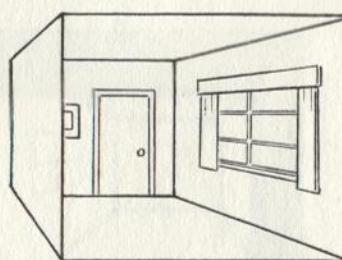
Where the vertical touches the perspective lines, draw two horizontals over to the other two perspective lines



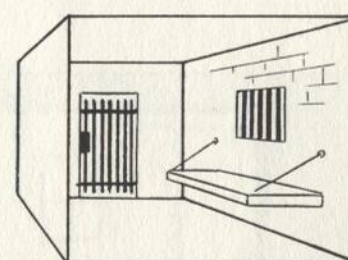
Now join the two horizontal lines with a vertical line. Now you have completed the rear end of the cube



Erase the perspective guide lines to the vanishing point beyond the cube and any lines hidden by the side of the cube



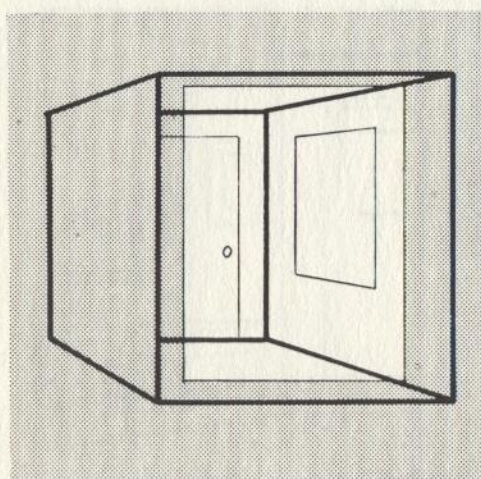
By the addition of windows, curtain and a door your cube is now a convincing room



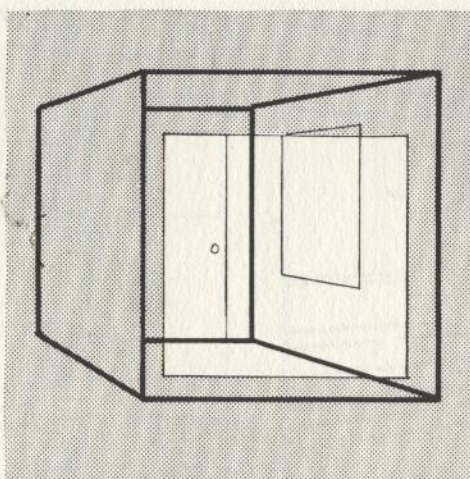
This basic cube can become any room by changing style or type of furniture. You can make it a bedroom, office or prison

## Using perspective in the panel

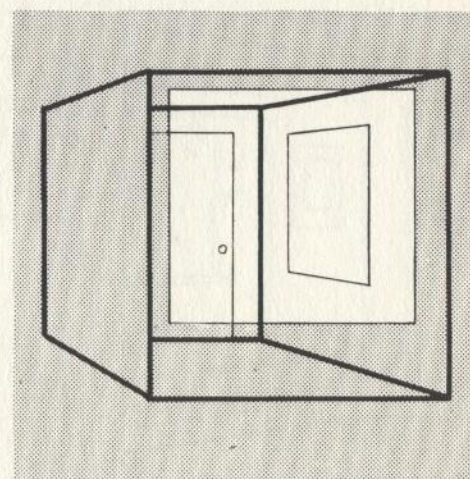
With one basic cube you can change the background scene or view by varying the placement and shape of the panel frame as shown below.



Here is the panel or picture frame placed over the cube to make the interior of a room for a cartoon. Note that we do not use the whole cube but only the part inside the panel frame



By changing the shape of the panel frame and placing it lower on the cube, we change the view — because we see no ceiling and the door and window are running out of the top of the frame, we get the effect of looking down into the room

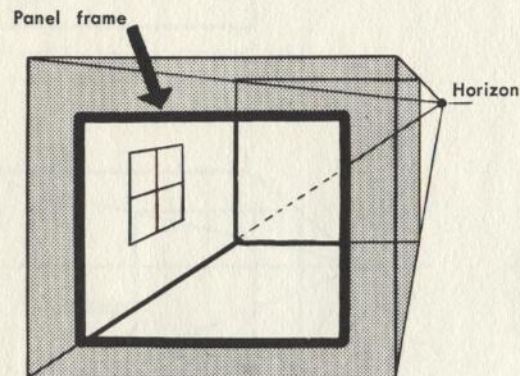


We can also change a background scene by moving the picture frame further up near the top of the cube until there is no floor showing. In this way we create the effect of looking up into the room

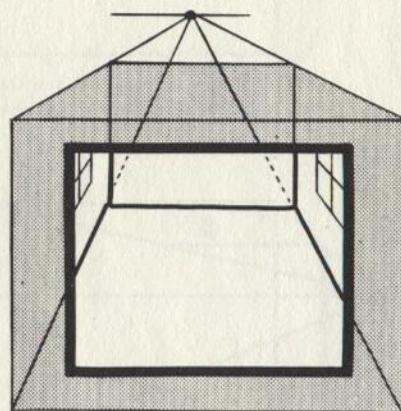


## The vanishing point

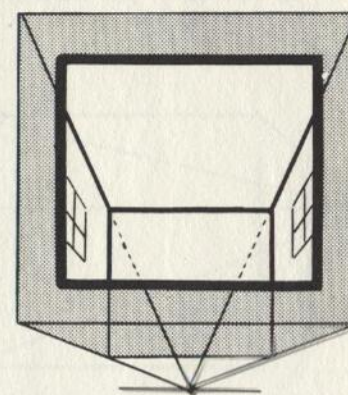
For creating different views of the room we can also place the vanishing point above, below, to the right, to the left or *anywhere* within the panel frame. To show the left wall of the room, the vanishing point is placed to the right of the panel frame; the right wall will show if we place it to the left. To show the ceiling we place it below the frame or to show the floor we place it above the frame. If we want to show all four dimensions of the room — both walls, floor and ceiling — the vanishing point is placed within the panel frame. As the vanishing point must be located on the horizon, the horizon will be at whatever level you place the vanishing point.



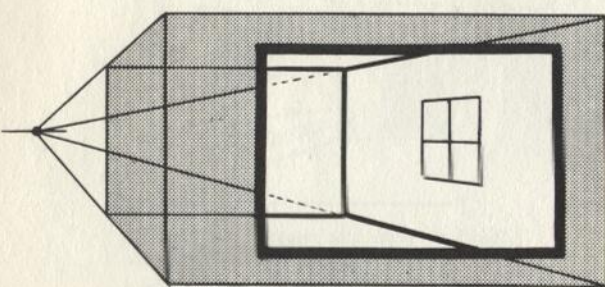
With V. P. to the right and above center of picture frame, you see the floor, left wall and back of room



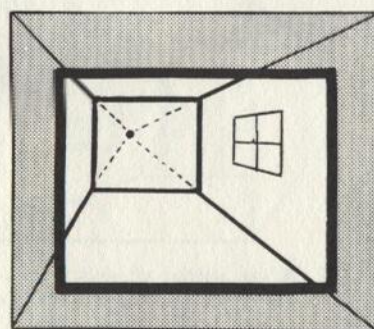
With V. P. above picture frame and centered, you see both side walls, floor and back wall



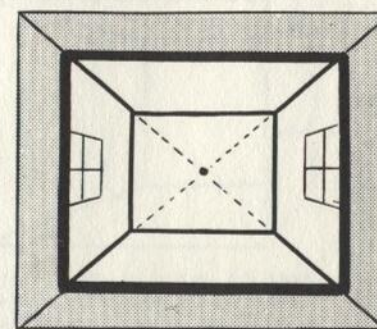
With V. P. centered below picture frame, you see the ceiling, side walls and back wall



By drawing a long flat cube you create a greater depth to the room than in the first illustration

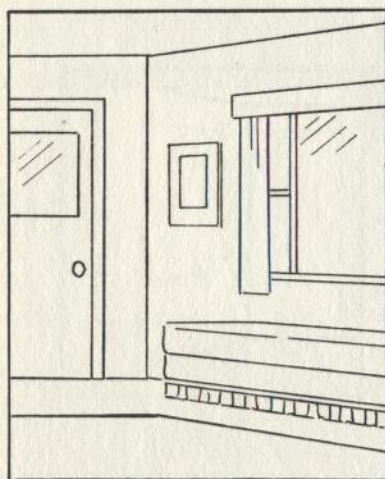


With the V. P. in the upper left corner of the picture frame, you create a long hall

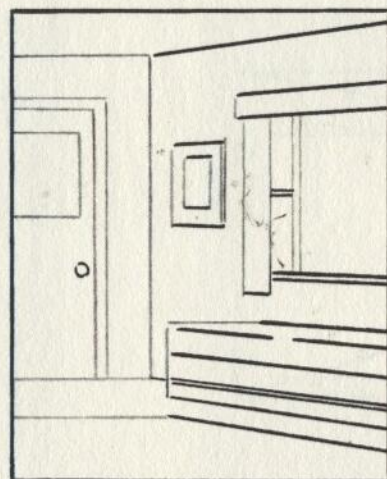


Here the V. P. is in the center of the picture frame. You see both side walls, rear ceiling and floor.

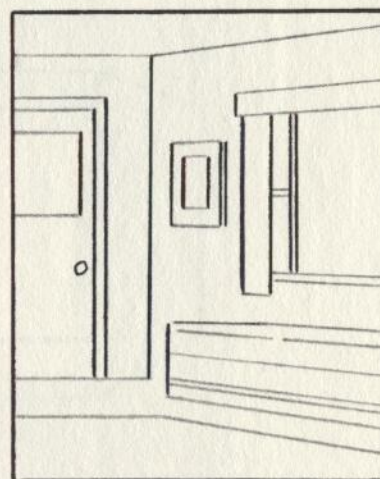
## The complete panel in one-point perspective



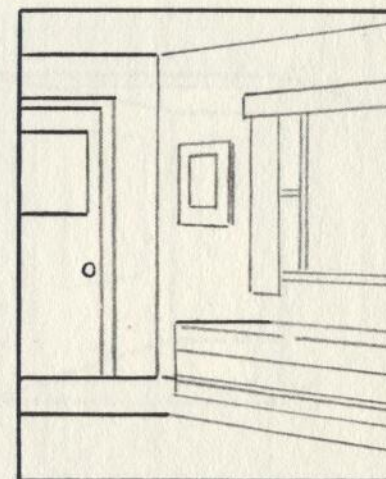
Here is a room plus furniture, door and window, combined to create a background for a situation in a cartoon panel



Here all horizontal lines parallel with the side wall are made heavy to show you that they must go to a vanishing point



Heavy lines show that all vertical lines are drawn parallel to the sides of the panel frame



Here, with heavy lines, we show that all lines parallel with the back wall are drawn parallel to top and bottom of frame

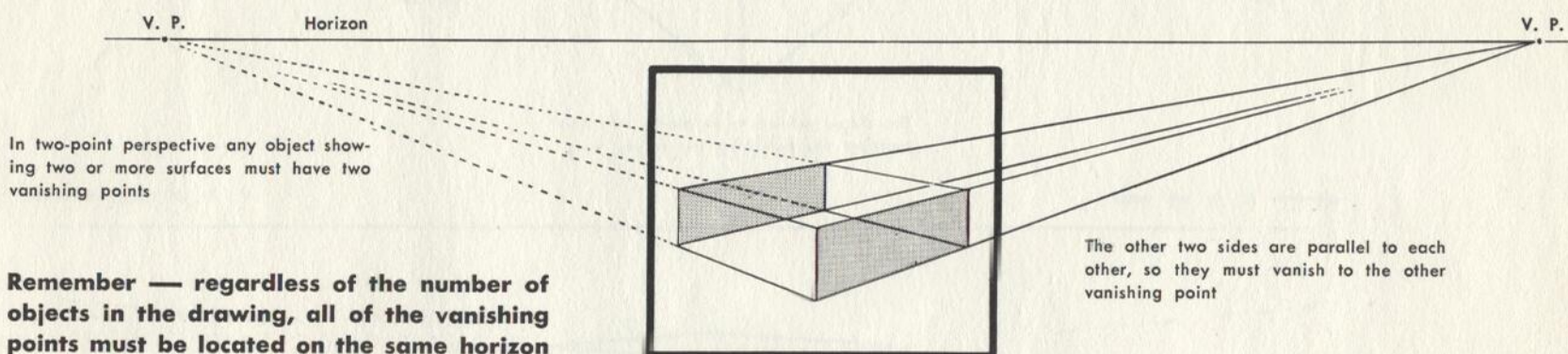
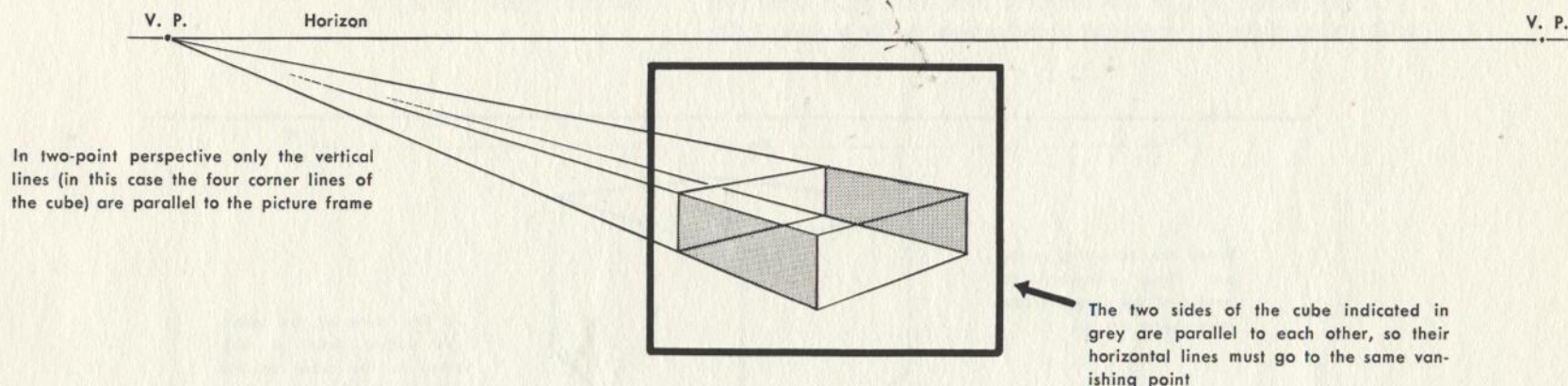


## Two-point perspective

In two-point perspective, there is only *one* dimension parallel to the panel frame. This is the perpendicular line of your drawing. Because there is only one dimension parallel to the frame, there are two other dimensions left to account for. We must, therefore,

establish *two* vanishing points on the horizon line.

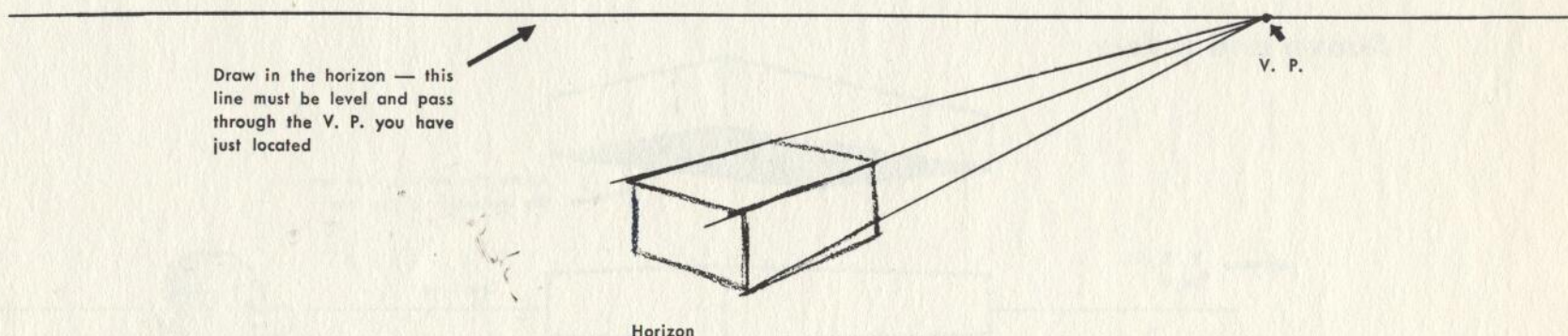
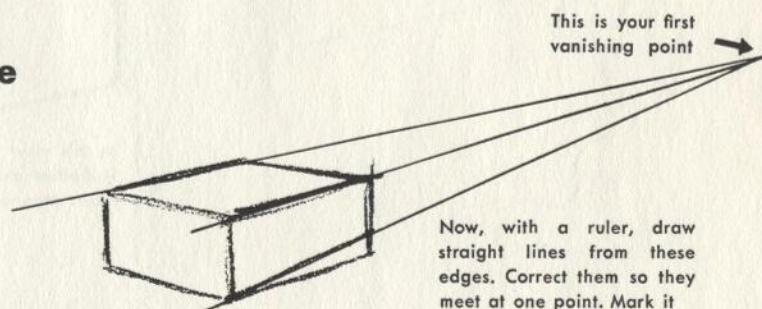
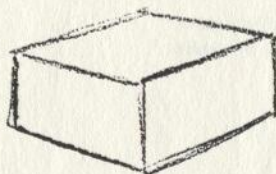
A cartoonist can do a lot with one-point perspective, but you'll find that you also need the two-point system every day. Study it until you understand it thoroughly.



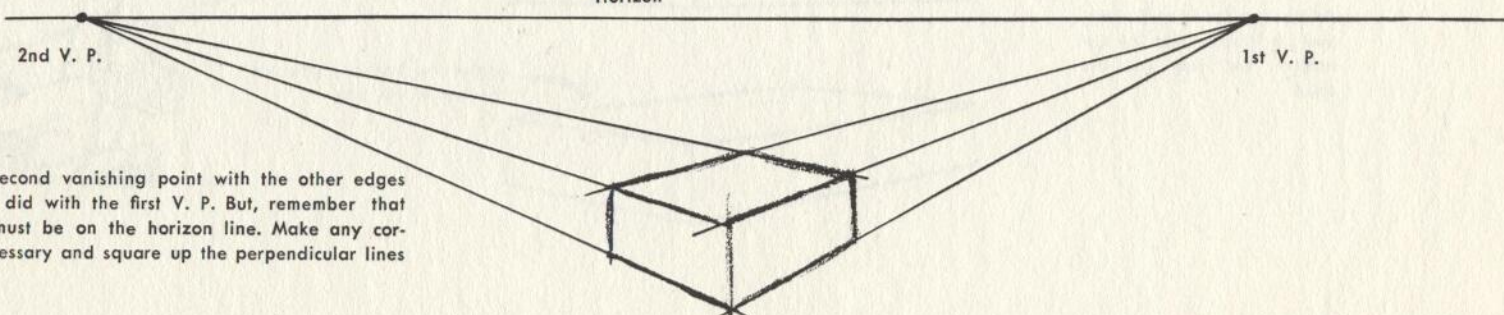
**Remember — regardless of the number of objects in the drawing, all of the vanishing points must be located on the same horizon**

## Checking the cube in two-point perspective

When you have drawn an object based on the cube, and it doesn't seem to look right, use this method of checking your perspective



Draw in the horizon — this line must be level and pass through the V. P. you have just located



Find your second vanishing point with the other edges just as you did with the first V. P. But, remember that this V. P. must be on the horizon line. Make any corrections necessary and square up the perpendicular lines

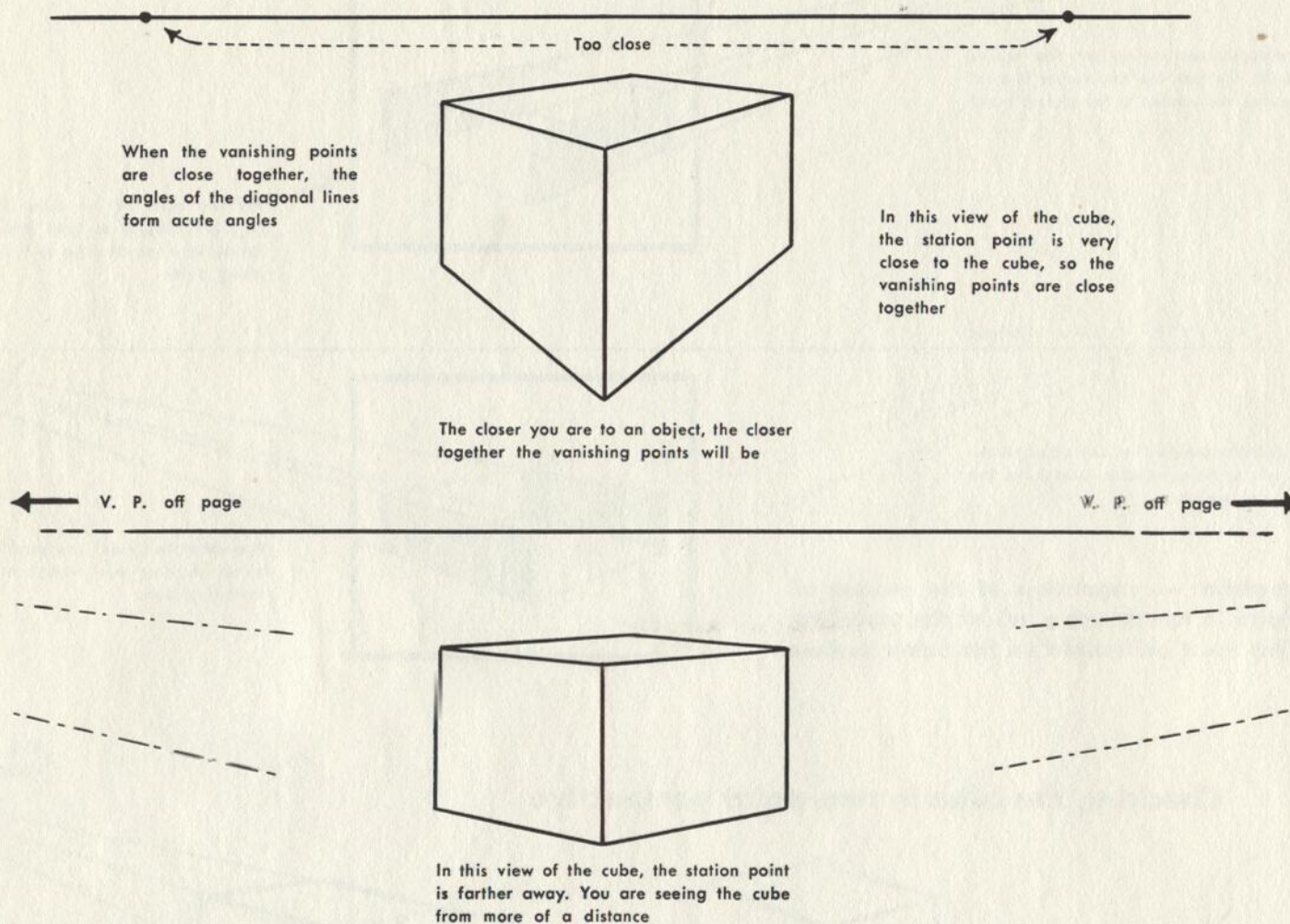


## Station point

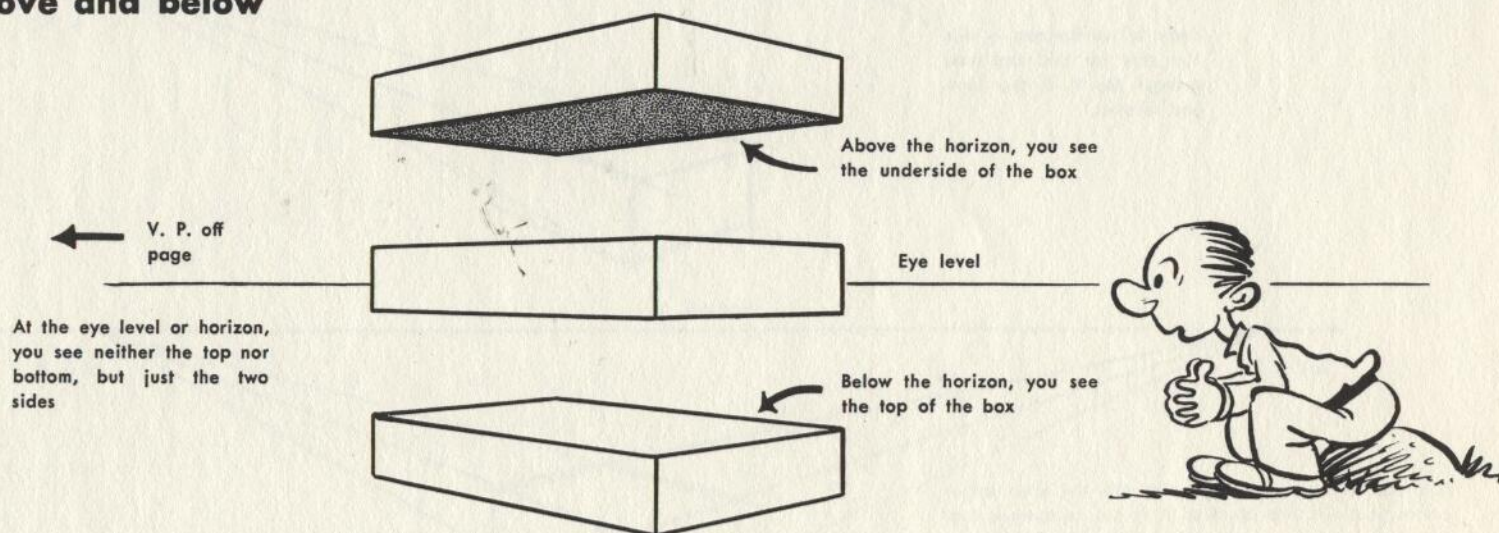
We have already stated that the *station point* is the point from which the picture is being seen. From it we get our "camera angle."

If you hold a square box about a foot from your eyes, you will notice there is considerable distortion to the shape of the

box. This is because the station point is too close to the object, which brings the vanishing points close together. Unless you really *want* distortion, keep your station point a reasonable distance from the object.



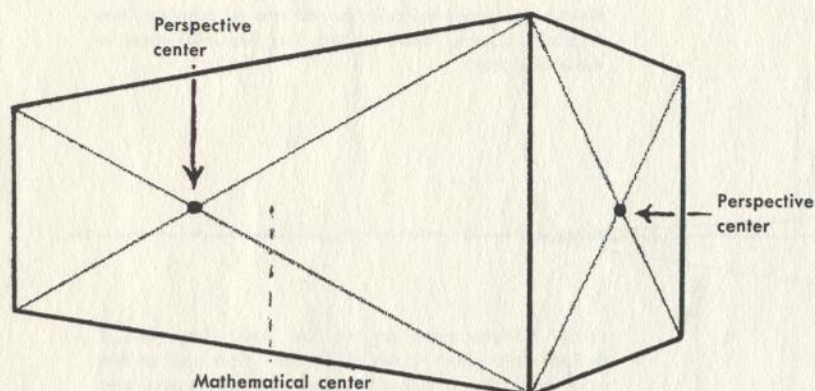
## Above and below



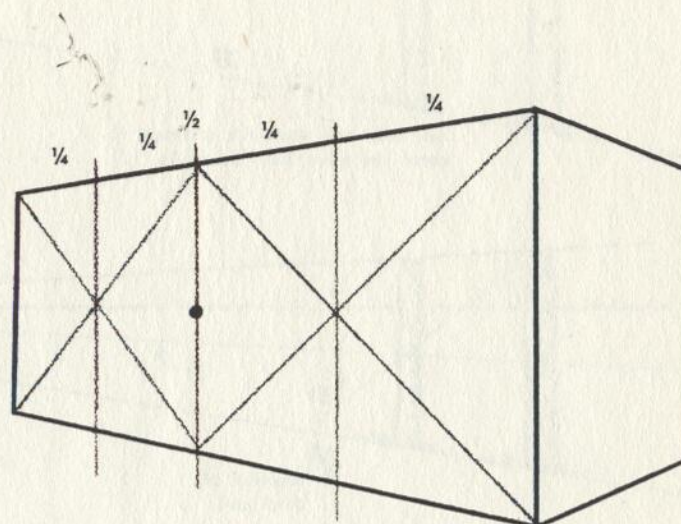


## Dividing the cube

When drawing buildings, it is sometimes necessary to divide the ends or sides into equal parts to locate doors and windows. Here is a simple way to do this.



To find the perspective center of the side of a cube or plane, first draw lines from corner to corner. Where the two lines cross is the visual, or perspective, center



To divide the plane into fourths, do the same with each half of the plane by first drawing a vertical line through the perspective center

## Locating the peak of a roof

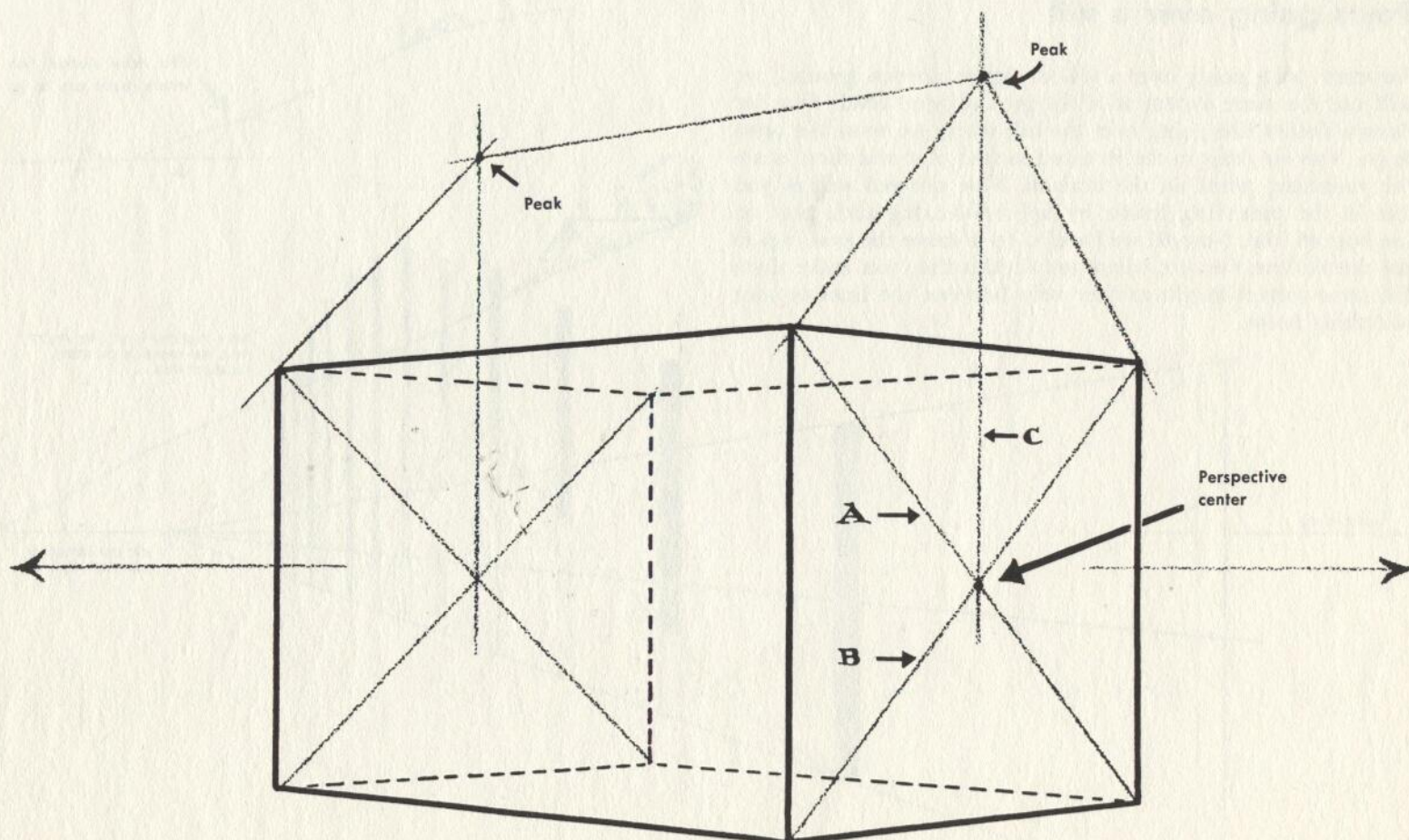
Many students and beginners have trouble locating the peak of a roof on a house that is drawn in perspective. The problem is simple, once you understand that the center of the end of a building is not the mathematical center when the building is in perspective. What you must find is the perspective center and the correct way to do this is:

1. Draw the cube of your building without a roof;

2. On the end of the cube, draw lines "A" and "B" from corner to corner;

3. Where the two lines cross is located the perspective center of that end of the building you are drawing;

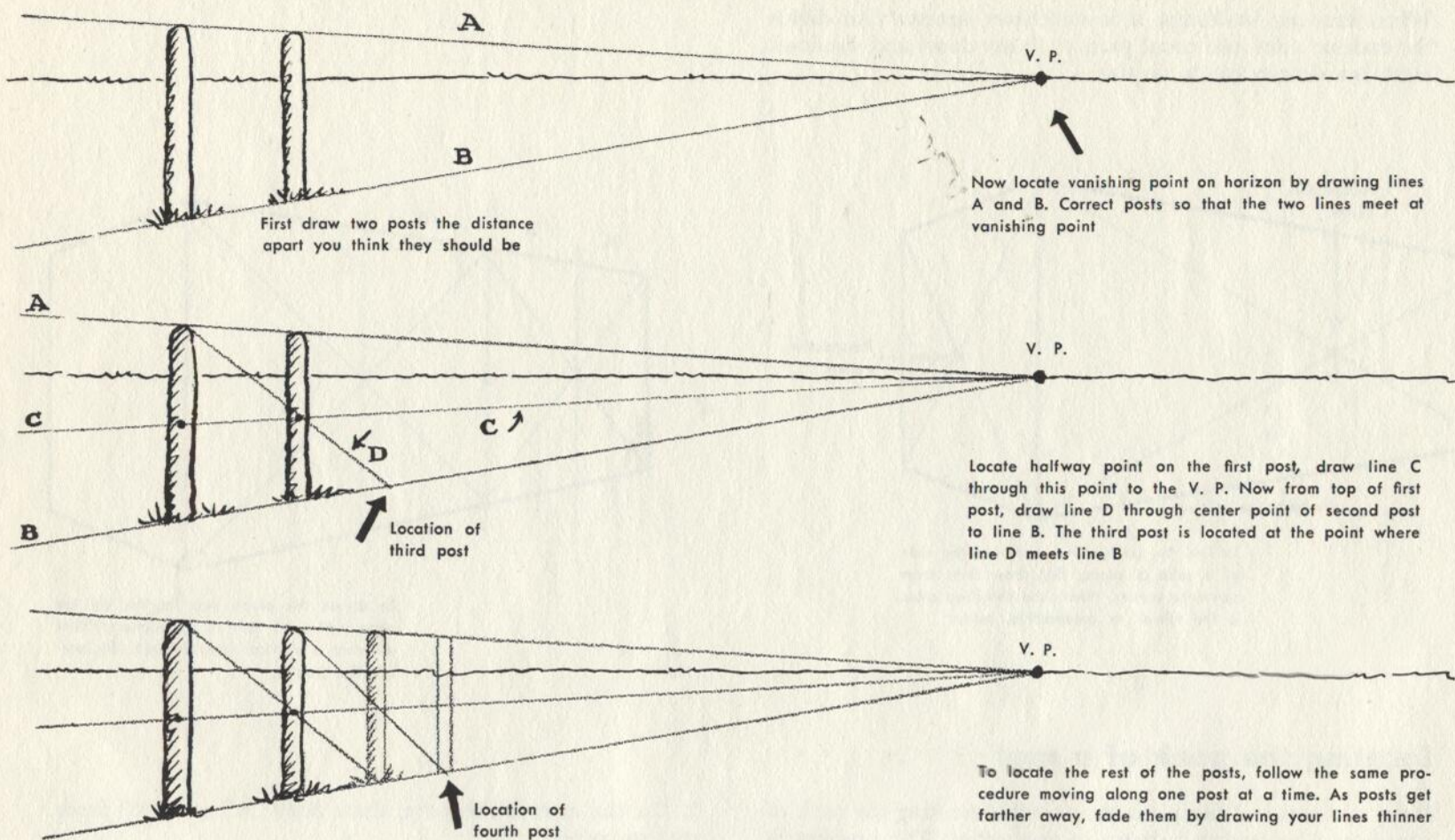
4. From this center point, draw a vertical line, "C" up. The peak of the roof can be located at any point on this vertical line depending on how steep a roof you want.





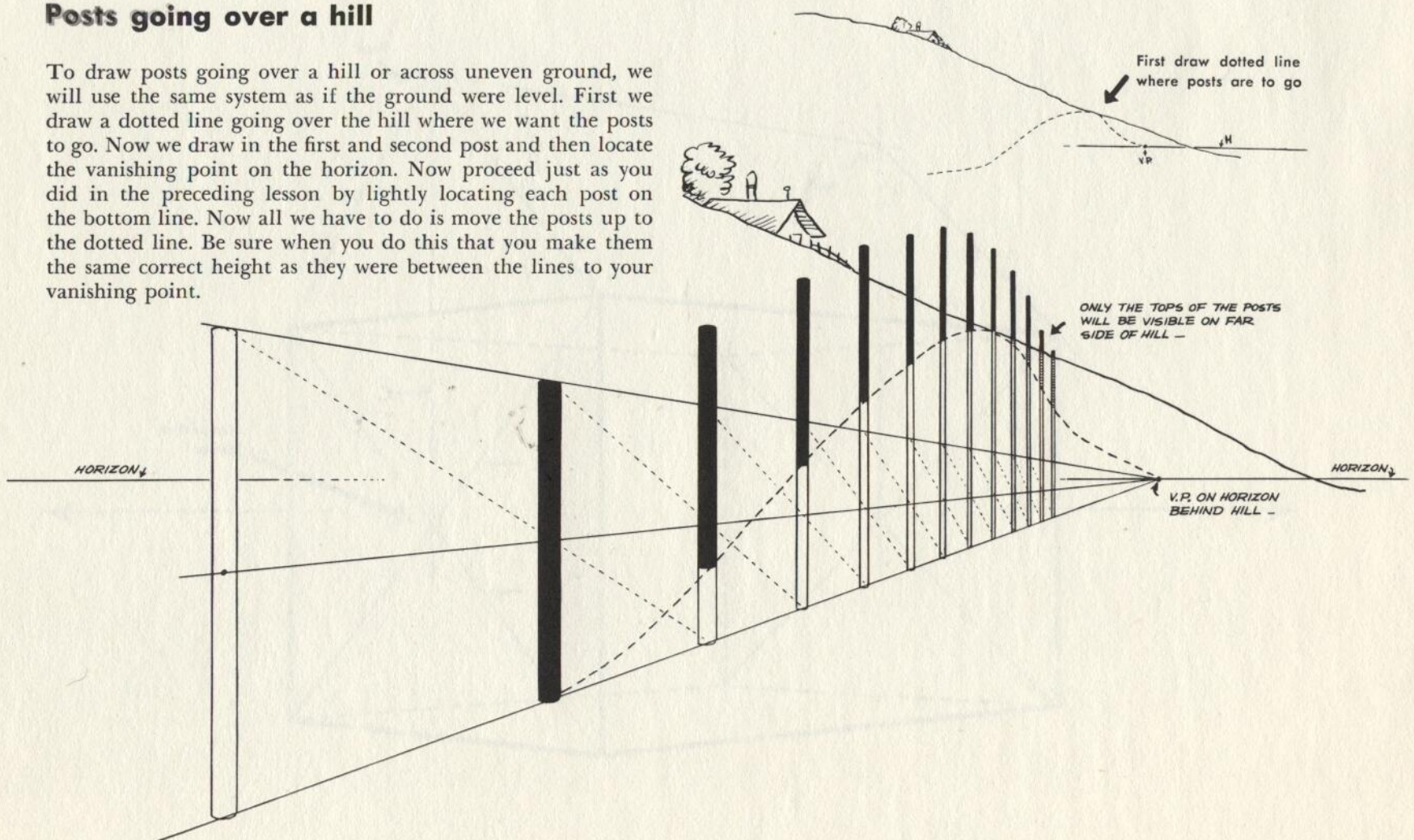
## Posts in perspective

When drawing equally spaced fence posts, trees, or telephone poles in a line fading away into the distance, it is necessary that they look right. As they get farther from you, they appear to be closer together so we again call upon perspective to help us determine the correct spacing between the posts.



## Posts going over a hill

To draw posts going over a hill or across uneven ground, we will use the same system as if the ground were level. First we draw a dotted line going over the hill where we want the posts to go. Now we draw in the first and second post and then locate the vanishing point on the horizon. Now proceed just as you did in the preceding lesson by lightly locating each post on the bottom line. Now all we have to do is move the posts up to the dotted line. Be sure when you do this that you make them the same correct height as they were between the lines to your vanishing point.





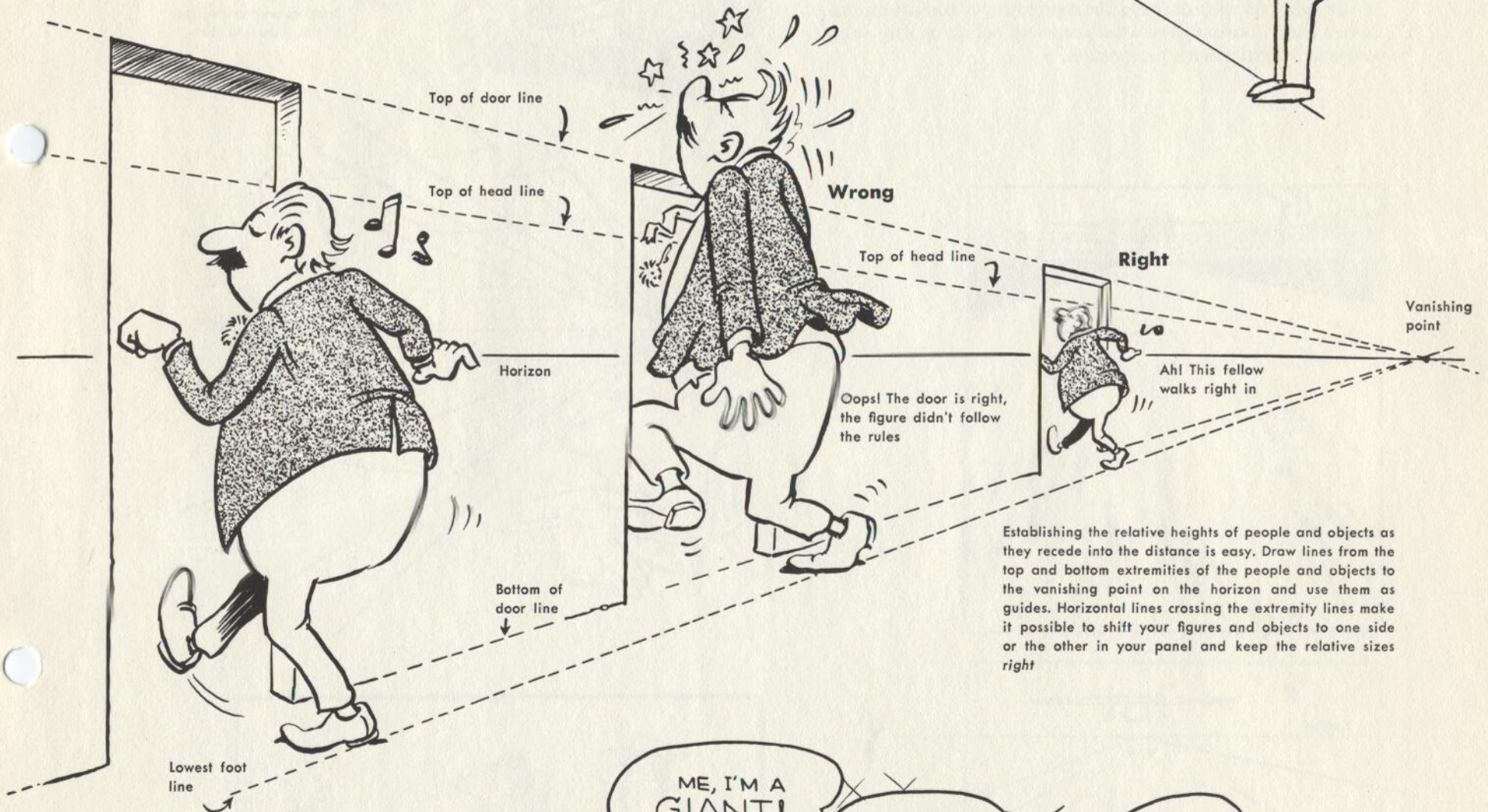
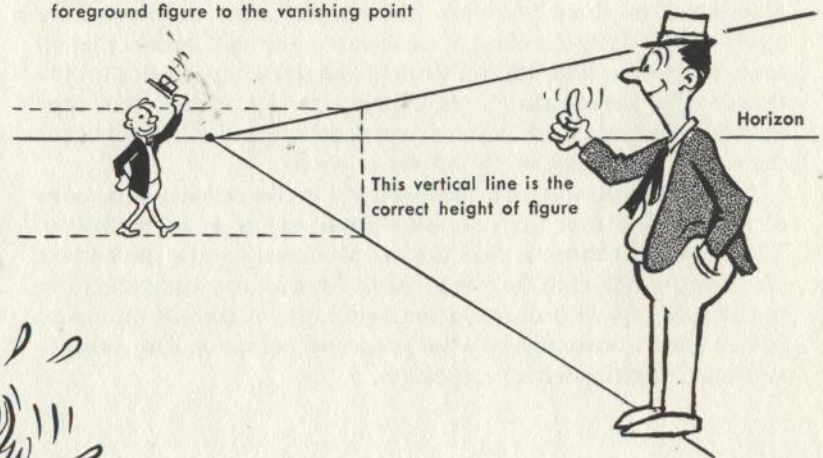
## Figures in perspective

Figures as well as objects in the drawing must be the correct size in relation to one another. With two or more figures in a drawing, it is a common mistake for a beginner to have one of the figures floating off the floor, or else, too tall for a doorway.

To place a figure in its correct position and keep it the right size is not difficult if you follow the simple system below.

By establishing the correct height of one figure, the correct height of all other figures of the same height is established by the two horizontal lines crossing the lines that lead from the figure to the vanishing point.

Correct relative height of same-size figure is established by two horizontal lines crossing the two lines from top and bottom of foreground figure to the vanishing point



Establishing the relative heights of people and objects as they recede into the distance is easy. Draw lines from the top and bottom extremities of the people and objects to the vanishing point on the horizon and use them as guides. Horizontal lines crossing the extremity lines make it possible to shift your figures and objects to one side or the other in your panel and keep the relative sizes right

People who are too large or too small for the scenery automatically become giants or midgets. Unless your idea calls for giants or midgets check your relative sizes to make your characters fit their surroundings

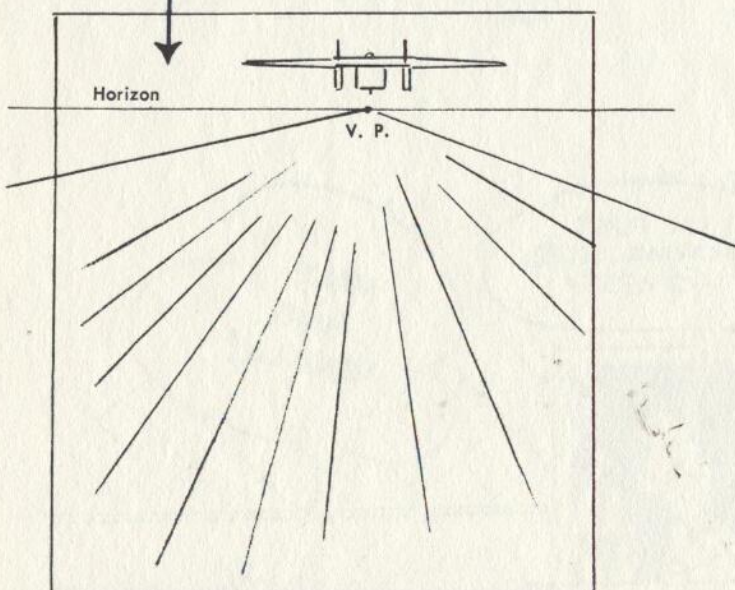




### Perspective in use

On these two pages some of your faculty's drawings have been diagrammed to show you how the simple rules of perspective apply to the daily drawing of cartoons — you will notice that in some places the finished ink lines of the drawings do not follow exactly the perspective lines. These are not errors, but they deliberately stretch the rules to emphasize a point or to permit the showing of more of the object or room.

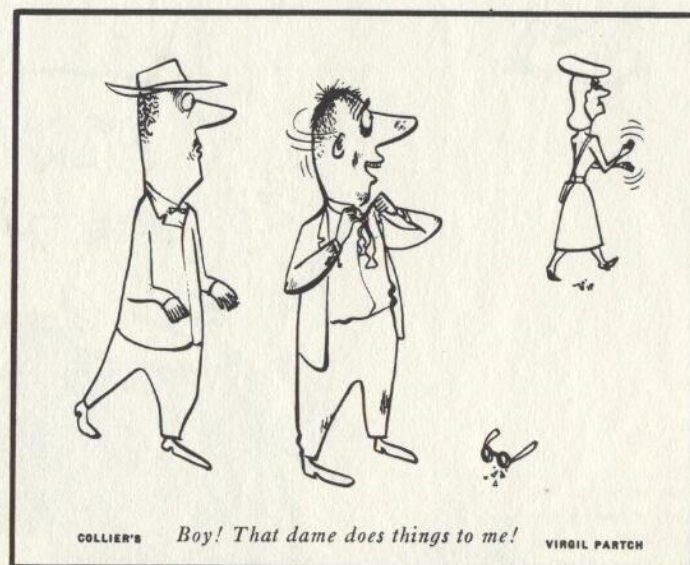
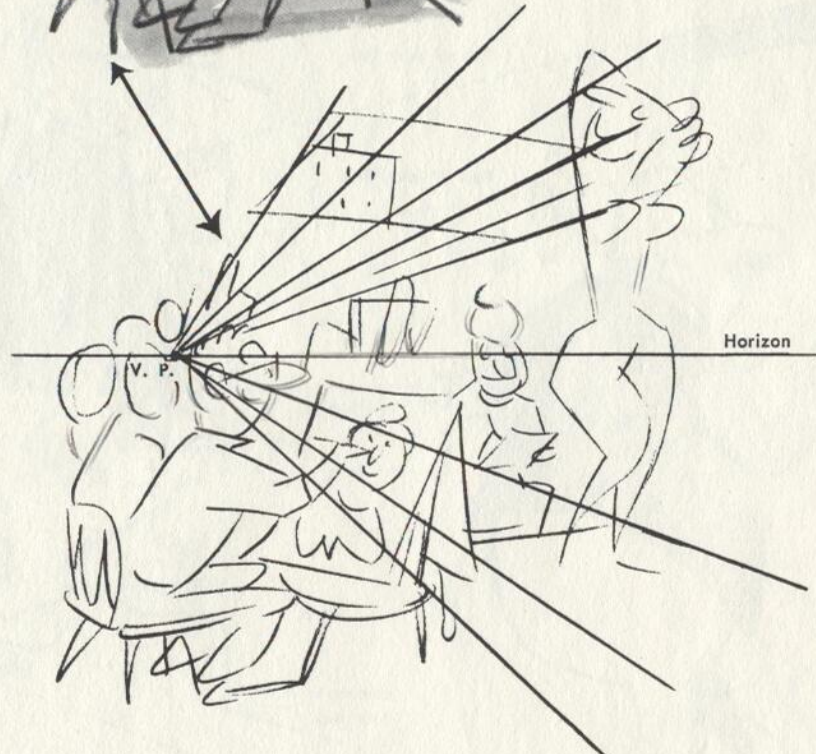
As we have said before, perspective for the cartoonist is more of a corrective tool than an iron-bound set of rules to follow. The important thing is that the inked lines *do* go in the correct direction, which calls for the artist to have a firm understanding of the rules. As with drawing the figure, the cartoonist must first have a good knowledge of what is correct before he can simplify and take liberties with perspective.



This panel from one of Milton Caniff's daily strips makes excellent use of one-point perspective to create depth and to put over the idea of the plane vanishing into the distance. Note the effective use of perspective lines on the runway which gives the plane speed and direction



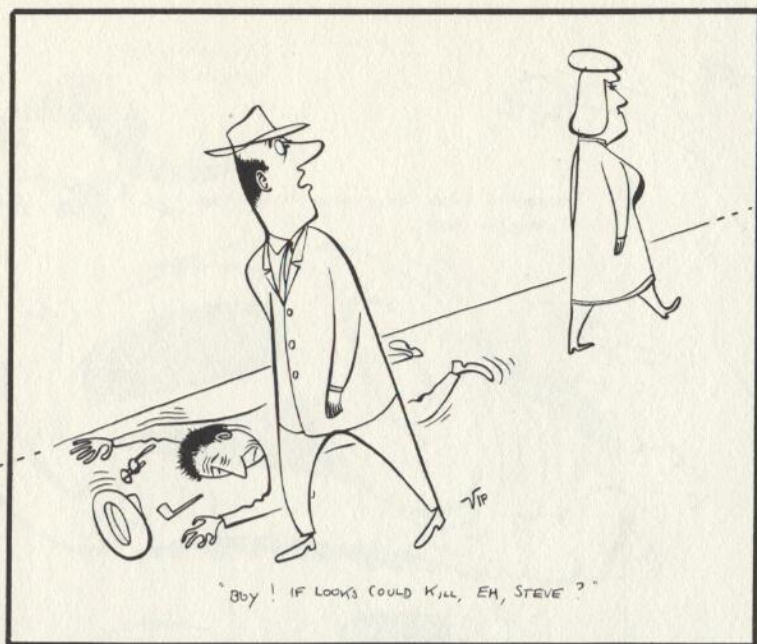
In this sketch by Whitney Darrow Jr. the horizon line is placed in the center of the panel so that the ceiling, with its skylight, as well as the floor of the room will show



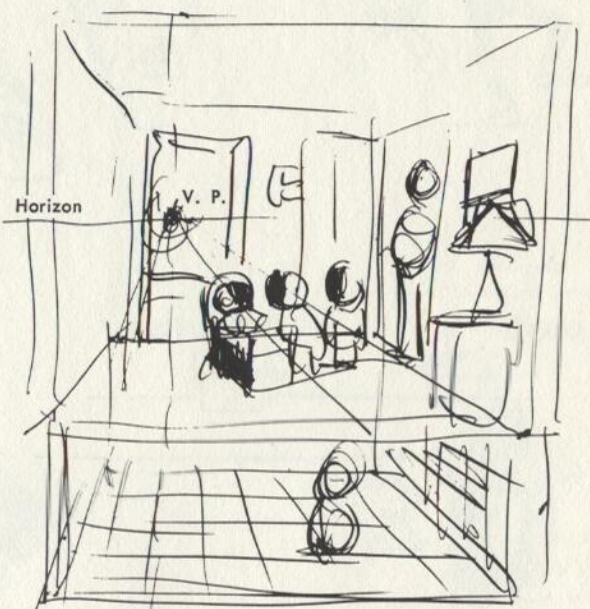
COLLIER'S Boy! That dame does things to me! VIRGIL PARTCH

Virgil Partch, the master of simplicity, has created depth and perspective in this panel by the use of figures only. The illusion is created by drawing the figure in the background smaller and raising it higher in the panel than those in the foreground





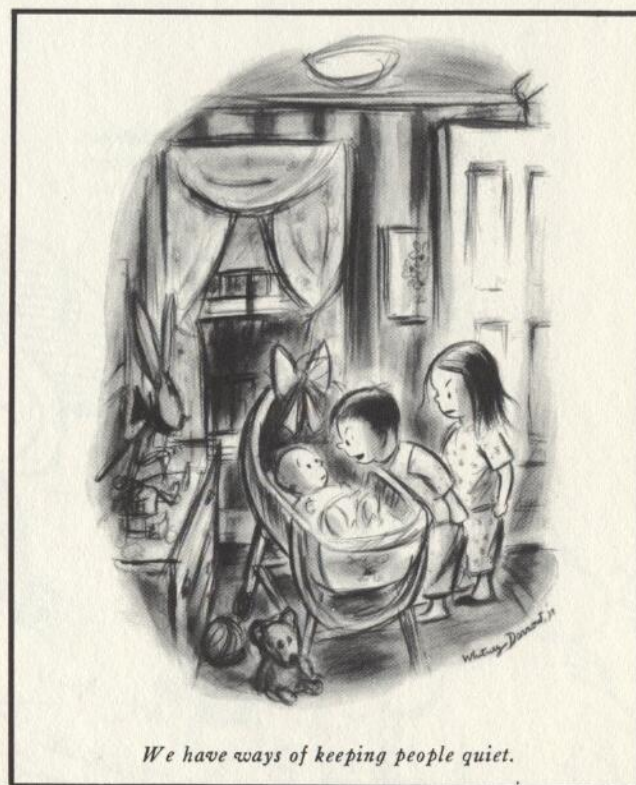
Virgil Partch here has created atmosphere and depth with a single line of perspective. As with the drawing on the preceding page, he has increased the depth by moving the woman's figure up and drawing it smaller



This rough sketch was the preparatory layout for the Whitney Darrow drawing below. With it he determined the type of perspective which would best fit the needs of his idea. In this case it was one-point perspective with the horizon passing through the center of the panel



Objects, such as the jeep in this Mill Caniff drawing, must be in perspective



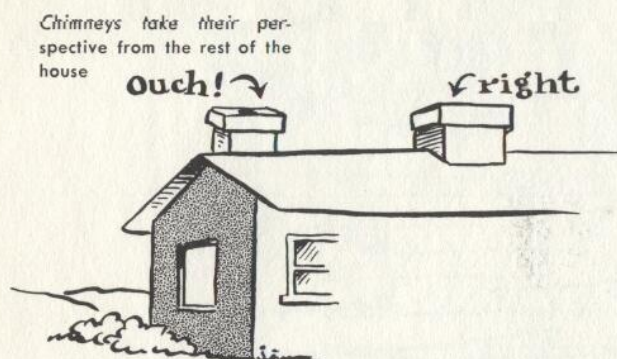
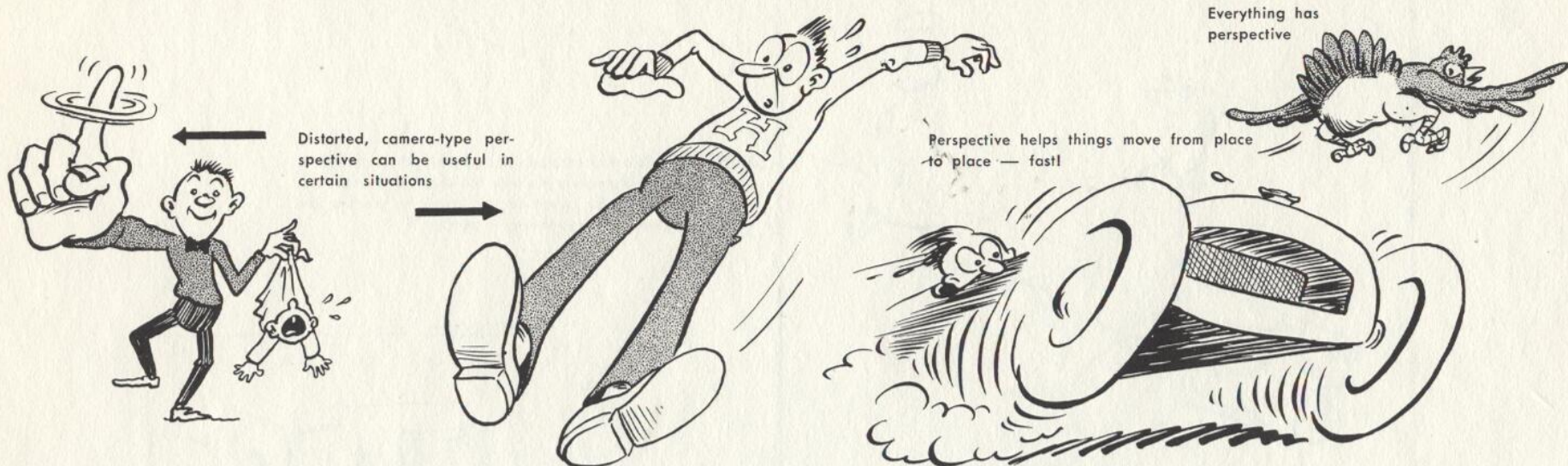
This is the finished art from the above sketch. Note how Mr. Darrow used only the center portion of the original layout but still kept the perspective

In this drawing Virgil Partch uses two-point perspective to give the reader an angle shot from above

V. P. off page



## A few examples

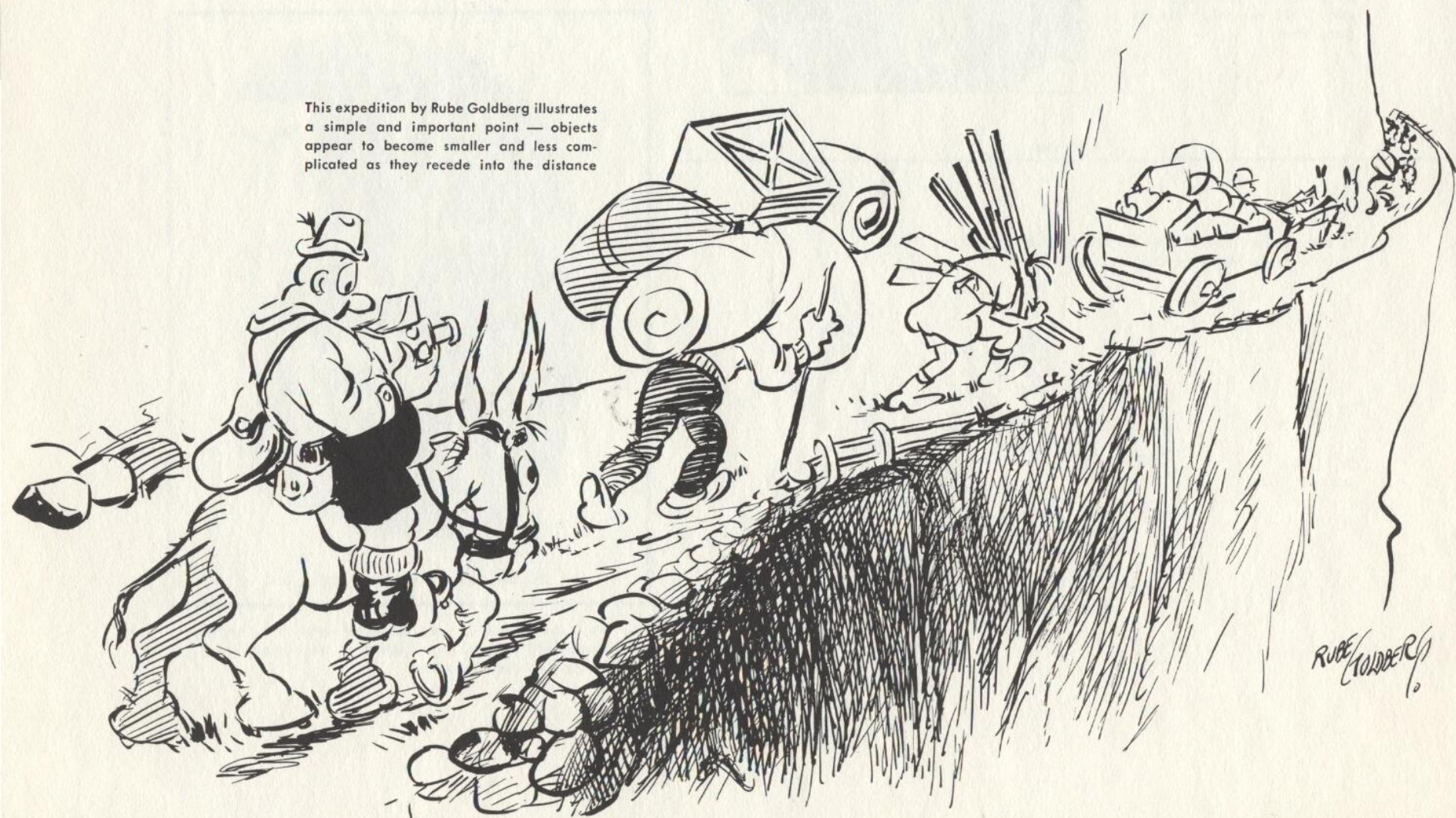


These fellows don't belong in the same panel



Hats are worn at different angles — and have perspective

This expedition by Rube Goldberg illustrates a simple and important point — objects appear to become smaller and less complicated as they recede into the distance





FAMOUS ARTISTS CARTOON COURSE

Student Work

Lesson 13

To study and practice

Perspective is a basic aid in making your cartoon scenes lifelike. Unconsciously you have been using it for better or worse ever since you crayoned your first doodle on the nursery wallpaper. In this lesson you have been given some simple rules for making your drawings look right.

One-point and two-point perspective is all you need as a cartoonist. Before tackling these assignments, you should practice the methods explained in this lesson. With triangle and T-square, copy and experiment with the examples in the text. Perspective is funny stuff -- just when you've decided that one line to the vanishing point looks awfully odd to the eye, you draw another line to it and... bingo! It looks right! Learn the rules and stick with them.

We will criticize and grade your assignments on the basis of how well you understand and use one-point and two-point perspective. Also, on all following assignments, you will be expected to know and use the rules of perspective in your drawings.

The assignments you are to mail to the School for criticism

ASSIGNMENT 1: One-point Perspective

On a piece of 11 x 14-inch Bristol board, rule and ink a panel 8 inches wide and 5 1/2 inches high. Using one-point perspective and the methods described on page 7 of this lesson, draw a room. For props, draw a sofa, wall mirror, window and door in your picture. On the sofa draw either a man or a woman. In the center of the room, talking to the character seated on the sofa, is a second person, either male or female. Finish this assignment in ink, but do not erase your pencil lines to the vanishing point. We need them to see if you understand the lesson.

IMPORTANT - Mark this sheet ASSIGNMENT 1.

ASSIGNMENT 2: Two-point Perspective

On a piece of 11 x 14-inch Bristol board, draw a panel 8 inches high and 10 inches wide. Locate the horizon line near the top of the panel.

Using two-point perspective, in this panel draw a simple house with a peaked roof. Draw the house as if you were viewing it from above. Show it in a three-quarter view, so one end and a side are seen.

Locate a door in the center of the end wall, and in the center of the side wall draw a large picture window. Show a woman hanging up wash on a clothesline in the yard, and add other details to make the house look livable.

Finish in ink, but leave your pencil guide lines to the vanishing points, so we can use them to check your drawing. (These vanishing points need not be on your paper. Note the diagram on page 4, bottom right.)

IMPORTANT - Mark this sheet ASSIGNMENT 2.

Present your assignments in the same clean, professional manner you would use if you were submitting them to the cartoon buyer of a publication. Letter your name, address and student number carefully in the lower left-hand corner of each page. In the lower right corner, place the Lesson Number and Assignment Number. Mail to:

FAMOUS ARTISTS CARTOON COURSE

Westport, Connecticut

BE SURE to fill out the return shipping label and enclose it with your assignments. This helps a lot in getting your assignments back quickly.



**Famous Artists Cartoon Course**  
Westport, Connecticut

# **Light and shade**

Lesson

# **14**

Rube Goldberg

Milton Caniff

Al Capp

Harry Haenigsen

Willard Mullin

Gurney Williams

Dick Cavalli

Whitney Darrow, Jr.

Virgil Partch

Barney Tobey







## Light and Shade

We now come to that part of cartooning that so often throws the average beginner into an inky tailspin. Drawing is fun, and it seems to reach its greatest point of enjoyment when we start to apply shading to the finished outline of our drawing. Even the professional, who should know better, is often caught in the trap of overshading. So you can see how easy it is for a beginner to lose his head and scratch in a thousand lines of shading, where three would have been more than enough. Most cartoon editors say they can immediately tell an amateur's work by the amount of shading.

For some reason the beginner thinks that he or she can improve or cover up the faults of a weak idea or basic drawing by the addition of several miles of pen scratches. Some novices get so pen-happy they cover everything from derby hats to door knobs with a heavy coating of what looks like hair.

There are technical as well as artistic reasons for keeping the shading in a line drawing to a minimum. Today's comic strips and most magazine cartoons are reduced down to the size of a large postage stamp. Years ago, the comic strip was reproduced eight columns in width. It ran across the full width of the newspaper page, but today the average comic strip is reproduced four columns wide or just half the length they used to be. You can readily see what effect this increased reduction has upon the shading. Billy Debeck, creator of the "Barney Google" feature, was considered by many to be one of the greatest penmen in the business. His drawings were filled with delicate shading and special effects. In the late Thirties, however, when papers began to cut the size of their strips, even he, who was a master of the art, found it necessary to eliminate about eighty per cent of his shading. His lines which were so beautiful when reproduced eight columns wide became muddy splotches when reduced down to four columns. Newsprint, the paper that newspapers are printed on, is not a very good grade of paper, and reproduction is not always what it should be. Anything a cartoonist can do to make it easier for his work to be reproduced helps his reputation as a newspaper artist.

Take a look at Harry Haenigsen's strip, "Penny," and you will see how he has succeeded in almost entirely eliminating shading of a scratchy kind. Instead, he uses solid blacks to give his work depth and feeling. Harry's favorite advice to the beginner is: "If you don't know how to shade — don't." He doesn't imply you shouldn't learn to shade, but does mean that until you are ready to apply shading in the right manner and amount, it is better to leave it out of any work you are doing to sell.

The type of shading we have been discussing is the scratchy pen line kind with which most of us love to fill up blank spaces. Crosshatch and stipple are somewhat old hat now, although they turn up occasionally in a good pen drawing. But, there are other types of shading that are very necessary to your work. Among these are the solid blacks, used as shadows on the ground and on the walls of buildings. These solid blacks are often used to aid the composition or to point up the center of interest. Other types of shading or shadow are those all important little touches of black which we put under the lid of a table top or under the toes of a pair of shoes. On one of the following pages, you will see how these little touches of shading help give solidity of form to the objects, and keep them tied to the ground or any other surface.

The type and style of shading you should use will often depend on the immediate job you are doing. If it is to be reproduced in a newspaper on newsprint, keep your shading to a minimum. Later on, we shall take up wash and wash shading, and the halftone method of reproduction.

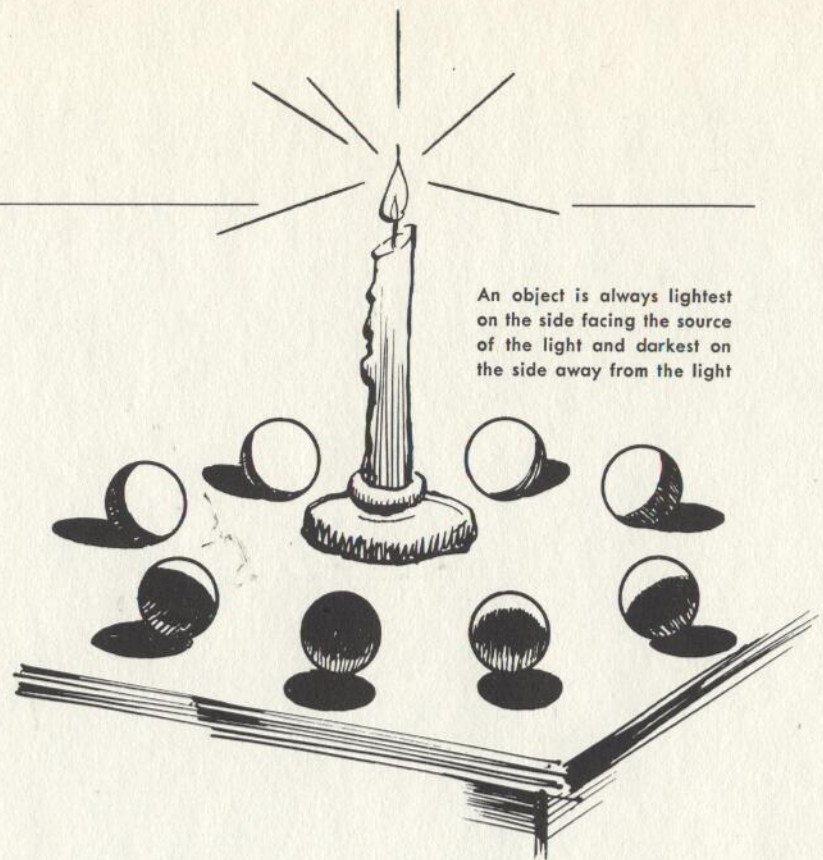
Shading is fun, but learn how to do it correctly. Practice and play with it until you can dash it off with just the right amount of lines. To save yourself a lot of headaches, always finish your drawing in outline, then put in all the shading with pencil. Study the effect. If you like it and the shading isn't overdone, ink it in. A good shading job, done with a pen, should give the reader the feeling that he is looking at distinct tones, not pen lines at all. This cannot be achieved without the most conscientious practice.



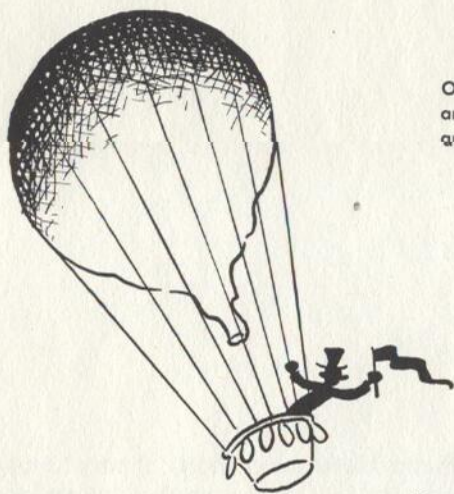
## Light and shade

Cartooning is a visual art — we have to see it to enjoy it. In order to see things, there has to be light. As you read this, it's a safe bet that there's light on the page. That light is coming from a source — and it has a direction that it travels in to hit the page — and everything else in the room. On the side away from the light-source, there is shadow, or shade.

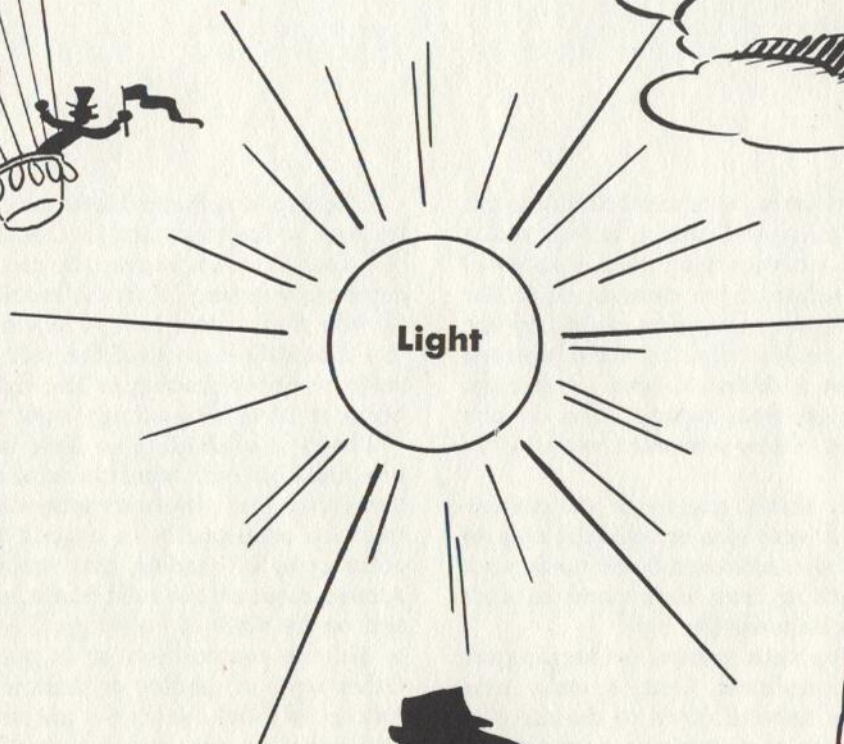
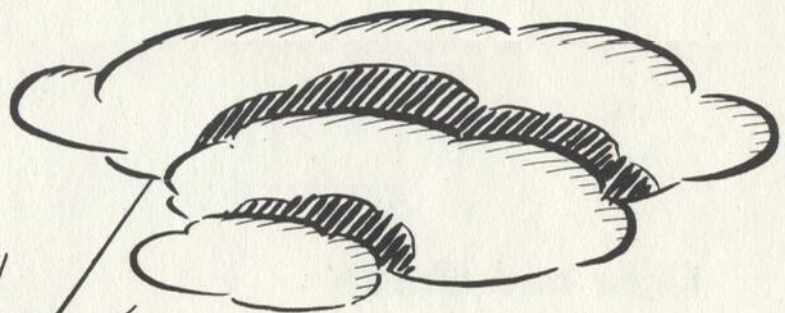
Everything you can see is composed of light and shade. Therefore, everything you draw must have some degree of light and shade — so your readers can see it. Cartooning is concerned with simplification — even the thickness of a line can suggest shading. This lesson is made up of tried and true tips on cartoon shading. When you know how to use shading properly, your drawings will really come to life on the page.



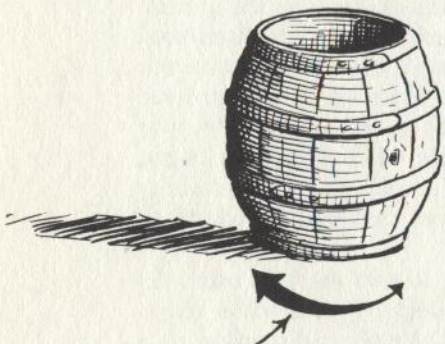
An object is always lightest on the side facing the source of the light and darkest on the side away from the light



Objects above the source of light are shaded on top, like this balloon and cloud



Here is a barrel with the light source to the right. Outside surface of the barrel will be light on the right side and dark on the left. However, because light source strikes on the left inside surface, the right inside surface of barrel would be dark



Because the barrel is round, the tone along the shadow side becomes darker on the surface that curves away from the source of light



When a figure or object is directly between the viewer and the light source it will appear in silhouette

Although this side is in shadow the sign is legible



Cast shadow has same general shape as the sign



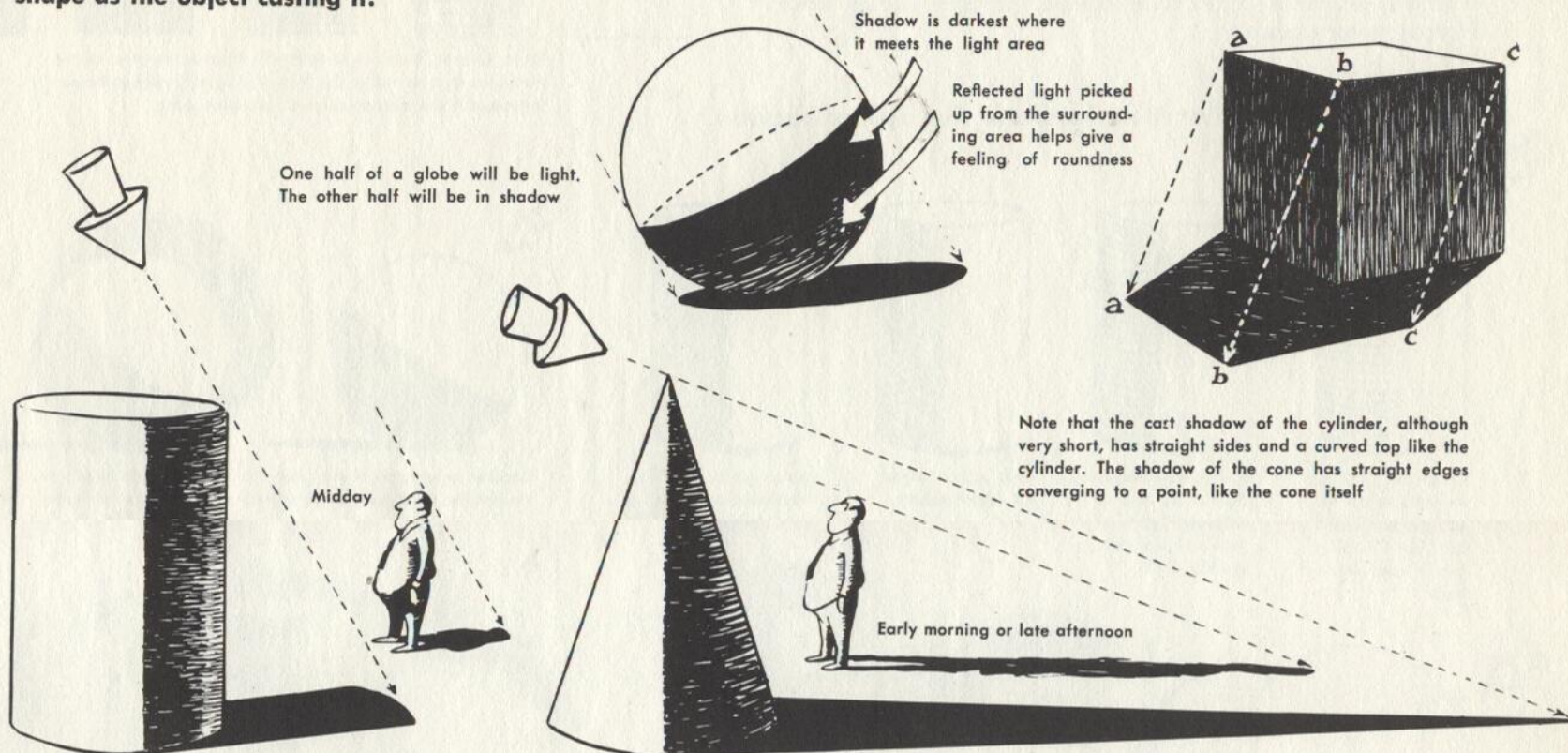
Shadow area has same texture as light area



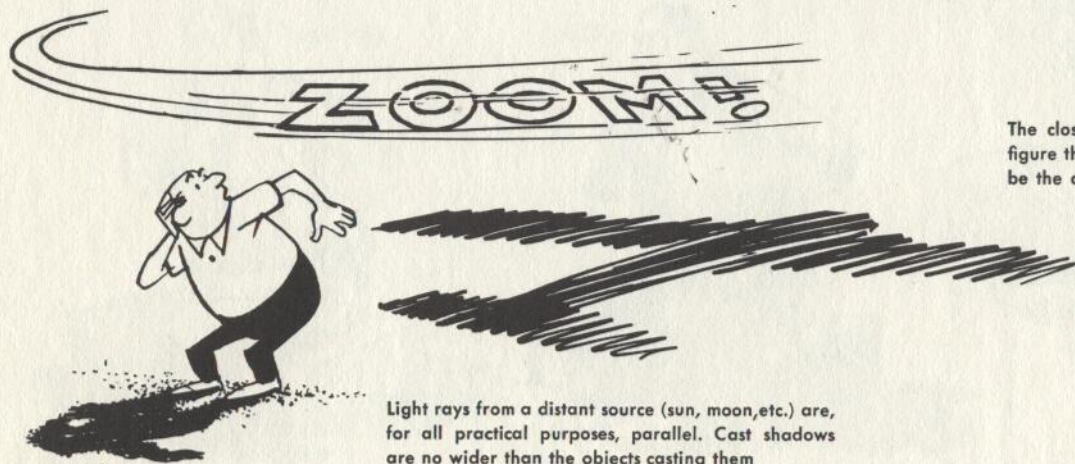
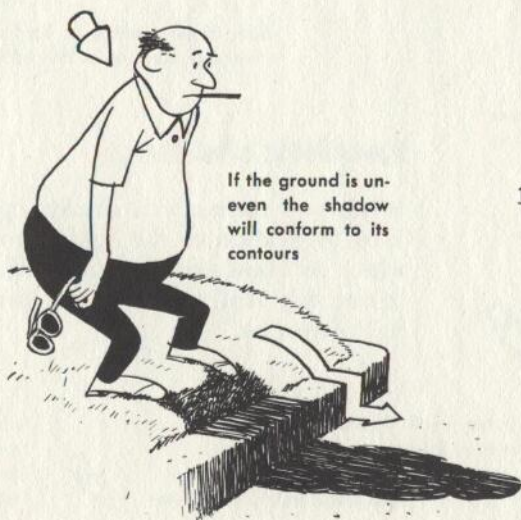
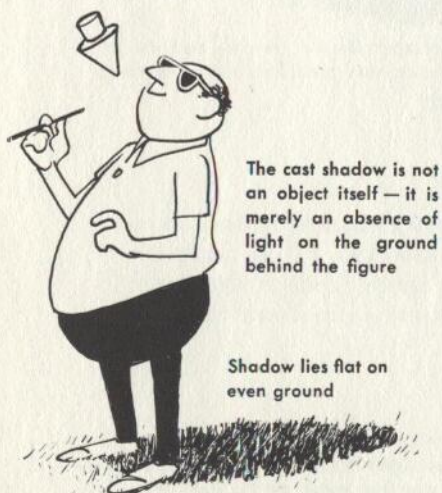
Remember — the shading follows the form of the object. The cast shadow will have the same general shape as the object casting it.

Three-dimensional arrows indicate the light direction

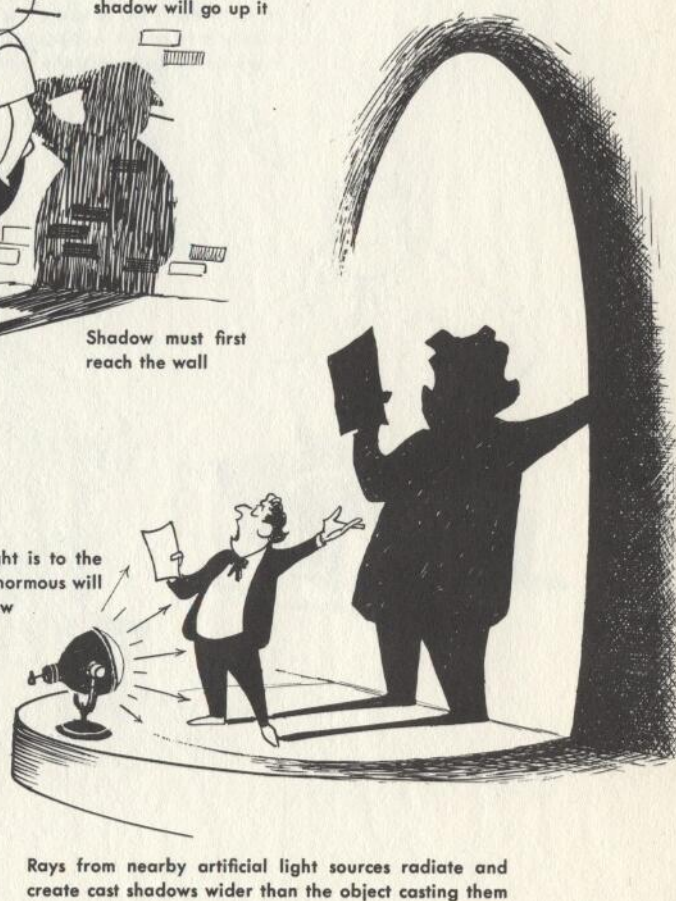
Two sides of a cube will be in shadow. The top and the two other sides (not visible here) will be in light



The angle of the light rays determines the length of a cast shadow. Compare the length of your shadow at noon with its length at sunrise or sunset



The closer the light is to the figure the more enormous will be the cast shadow





## Line shading

The purpose of line shading is to create varying degrees of gray tone. On page 8 of Lesson 3 we saw how it can create tonal patterns to give "color" and form to otherwise flat outline drawings. It also can show transition from light to dark when you're using light and shadow to give solid form to figures and objects.

Techniques vary — from evenly spaced, hard mechanical lines to nervous, scratchy ones. The thing to remember is that the more white space there is between the pen lines the lighter the tone will be. Heavy lines close together produce darker tones. Here are some examples.

White



Light gray



Medium gray



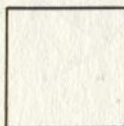
Dark gray



Black



Each of the three squares above has the same number of lines, but note the difference in tone



These squares have the same tonal values as the ones above them (you can determine this by squinting at them) but the pen technique is less mechanical and more interesting

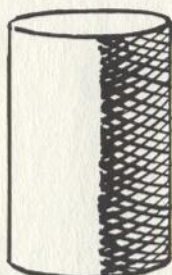
## Three-dimensional arrows indicate the light direction



Lines of equal weight give rounded form to cylinder but the shading has a mechanical look



Varied line widths (thin in the area of reflected light and heavy in the dark shadow areas)



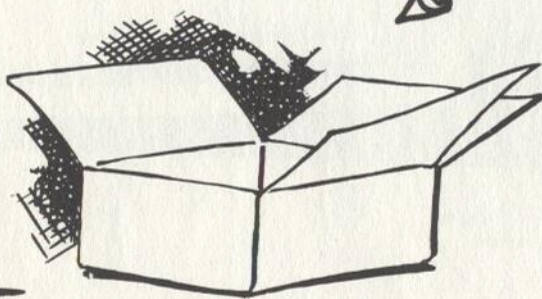
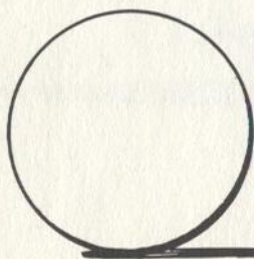
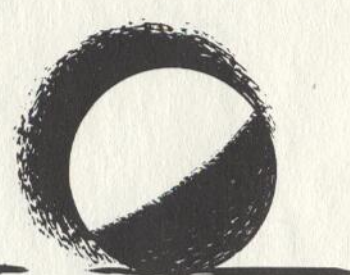
The same values by crosshatching



Lines go in all directions but values are maintained



Shadow area on an object gives it form, but a dark background behind the light area accentuates the solid form even more



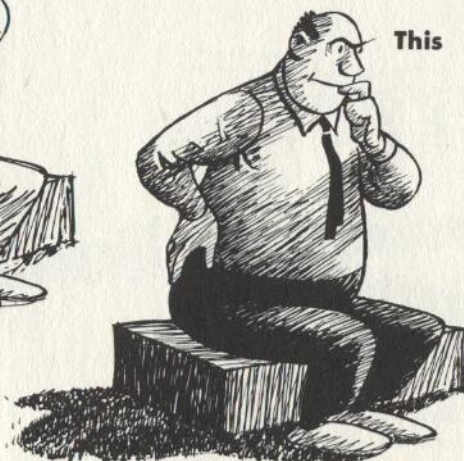
Basic forms revealed by light and shadow alone — using no outlines. Try to plan your drawings so that light areas appear against dark and vice versa

In cartooning, the simplest way to suggest bulk and solidity is to accent outlines on the shadow side. Keep in mind that light ordinarily comes from above



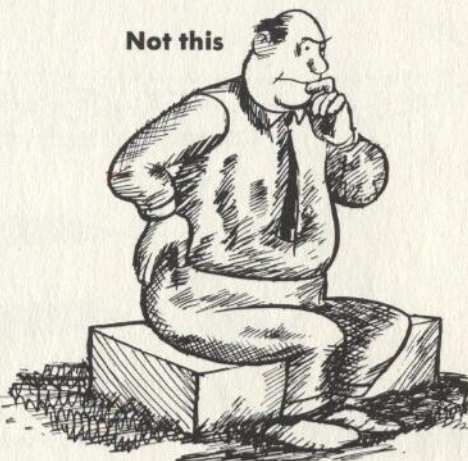
Ink in the overall shadow pattern first in an even, light tone

Then add details and accents



This

Indiscriminately putting in patches of shading produces lights in what should be shadow areas and darks that break up the light areas. This tends to destroy the form of the figure



Not this

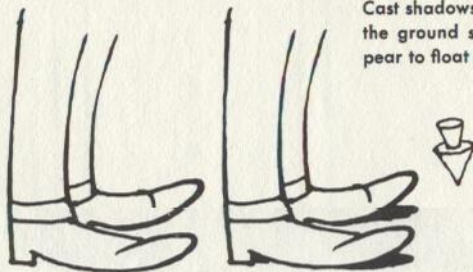
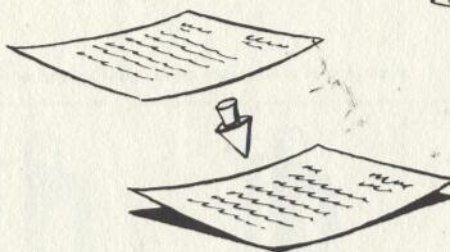


## Shadows — with and without

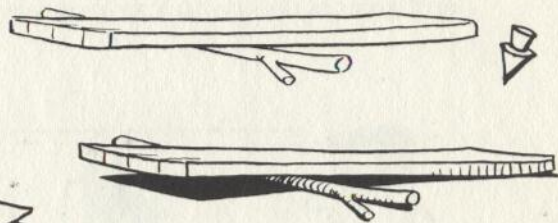
Without shadows objects and figures are just outlines. Note how a bit of simple shading nails them down and relates them properly to their surroundings. For the sake of simplicity have your light in each scene come from one direction only, and keep the shadows consistent with this light direction.



Simple shadows show that the figure leans out of the window with her arms resting on the sill. Dark interior makes figure more prominent and gives a feeling of depth



Cast shadows anchor things to the ground so they don't appear to float in space



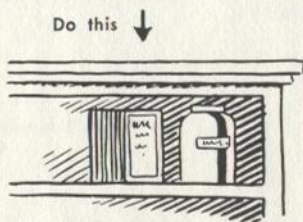
Shadow below the football shows that it's above the ground

## Some useful tips

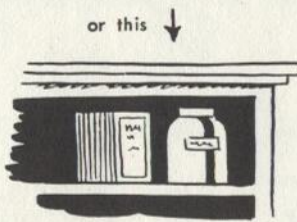
If you want objects to stand out on a shelf



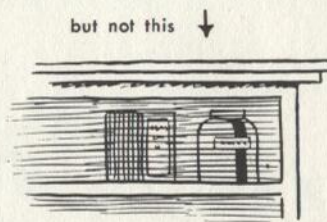
Solid black behind books gives depth to the bookcase



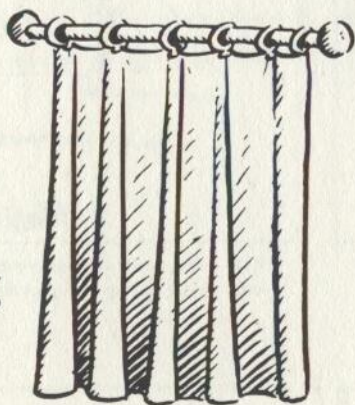
Do this ↓



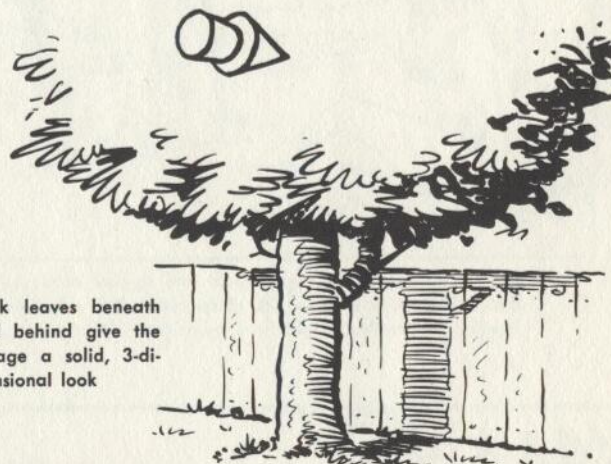
or this ↓



but not this ↓



Remember that light areas tend to come forward — toward the reader — dark areas to drop back. Note the folds of the drape



Dark leaves beneath and behind give the foliage a solid, 3-dimensional look

## Light to dark

Here are a few examples of how pen lines can make the transition from light to dark and vice versa



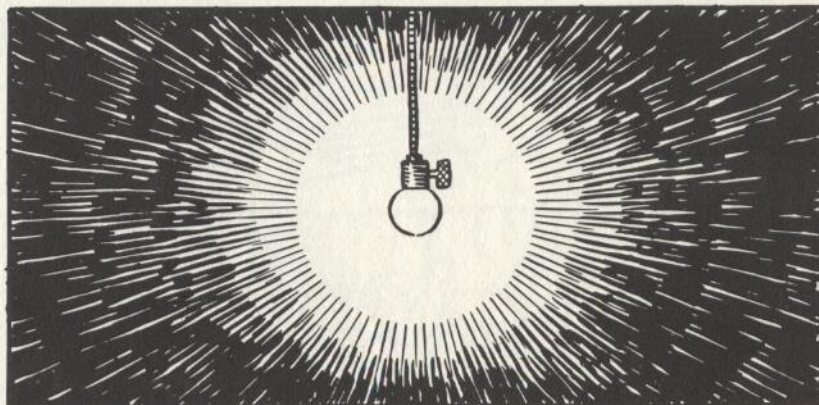
Horizontal line shading fading downward



Crosshatching fading downward



Solid black to white



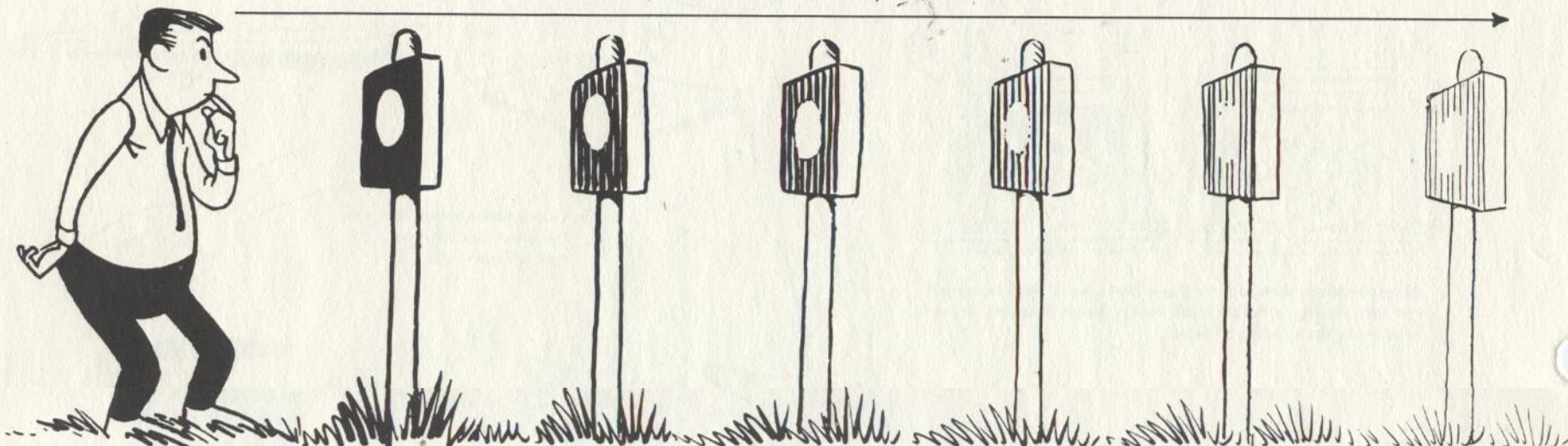
Somebody just turned on the light



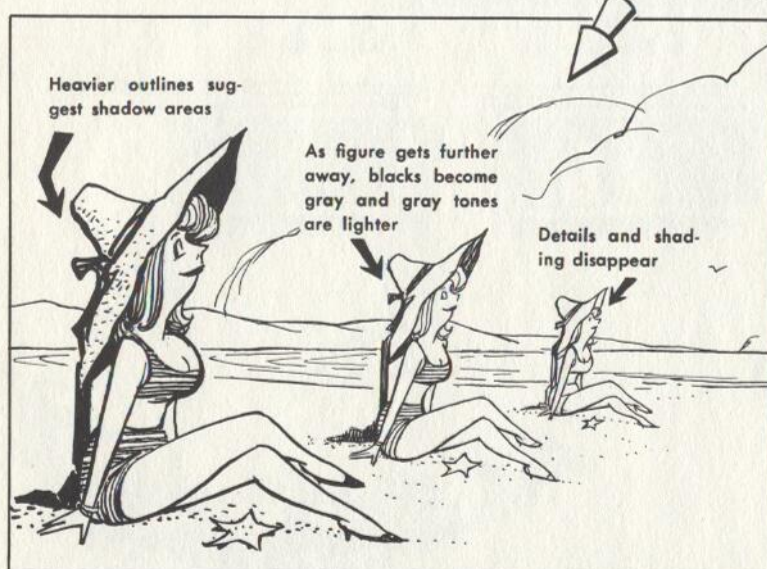
## Fading into distance

Our atmosphere is like a filter — the more of it between us and an object, the lighter in tone that object will seem. Here is a man looking at six signs. Each sign is actually the same, but they appear lighter as they get further away from him.

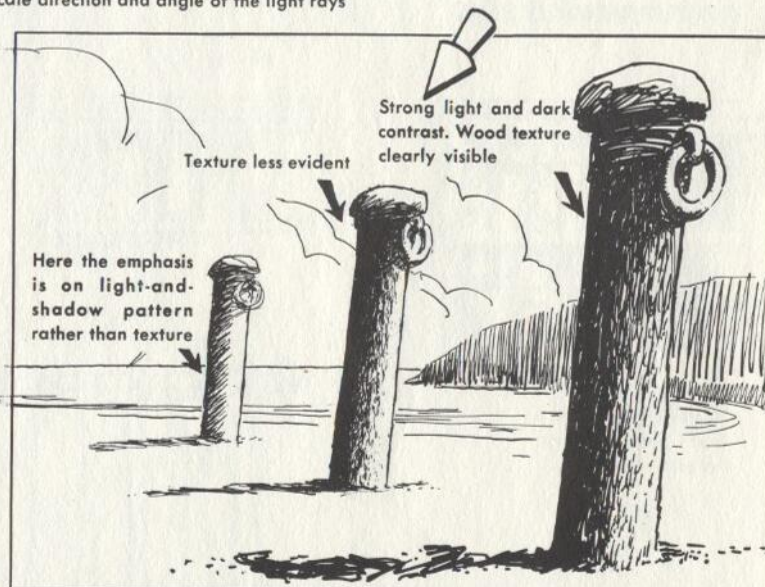
A cushion of atmosphere softens the tone of an object in the distance



Arrows indicate direction and angle of the light rays



In cartooning, you can suggest light and shadow simply by accenting the outlines on the shadow side of the forms. Also note how detail and shading become less emphatic as figure gets further away



In this more realistic treatment there is a gradual transition from light to dark on each object, giving it a greater feeling of bulk and solidity



**Wrong** — here the elements in the background are drawn in lines of the same weight as those in the foreground. This makes the picture flat — there is no feeling of distance



**Right** — by drawing objects in the background with lighter lines, and objects in the foreground with heavier lines and some solid blacks we get a feeling of distance

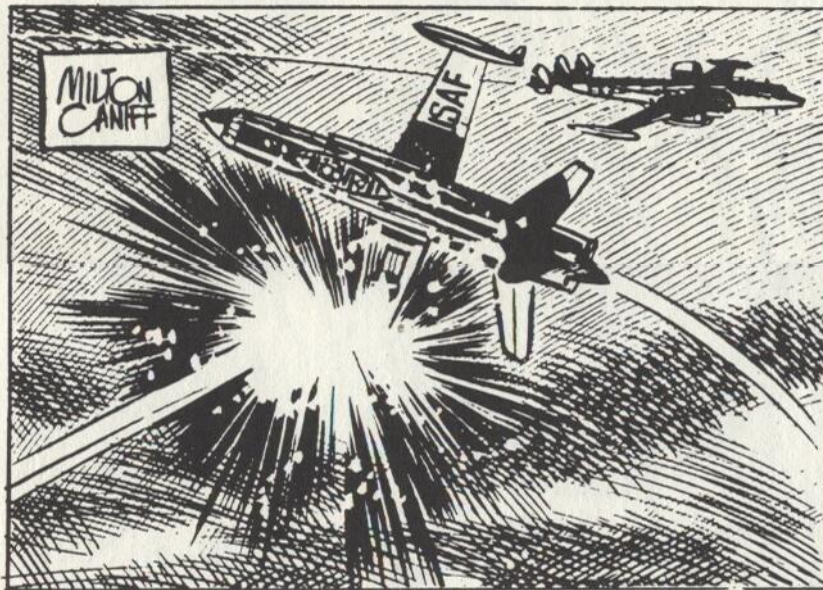


## Emphasis, mood and composition

Shading is useful in pointing up what is important in your picture, in establishing the mood of a situation, and in helping to create an interesting composition.

Strong contrast of light and dark will grab and hold a reader's attention, directing it to the areas you wish to emphasize. Weird shadows will create a spooky, menacing effect. The judicious use of light and shade will help strengthen and balance the composition of your picture.

### Emphasis



Here Milton Caniff, to dramatize the destruction of the plane, has used strong black-and-white contrast to emphasize the explosion



Here the two figures in the foreground are all-important to the situation. Although they are tiny in the scene, they stand out because they are silhouetted against an area of bright light



In this simple outline cartoon the blacked-in mask and gun immediately establish the character and intentions of the gentleman on the left

### Mood



Even though we don't see the creature that threatens the kid, its looming black shadow gives the cartoon a mood of spookiness and terror

### Composition



Our bird watcher and the interested object of his attention form the center of interest in the panel, but the composition as a whole is out of balance. All the weight is at the right, with empty space in the center, which gives the effect of two separate drawings



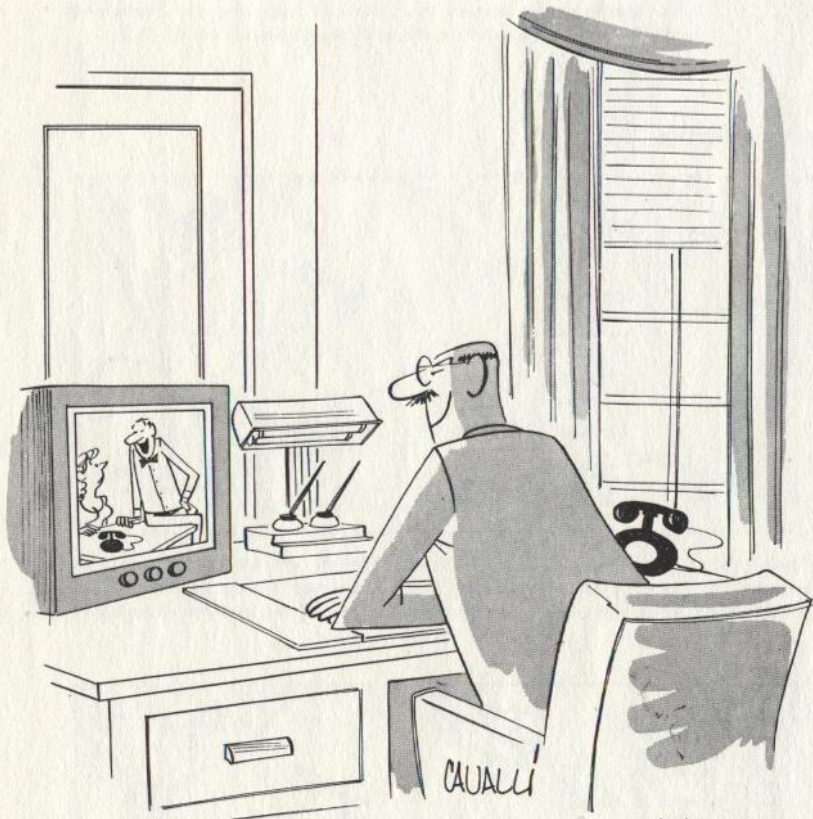
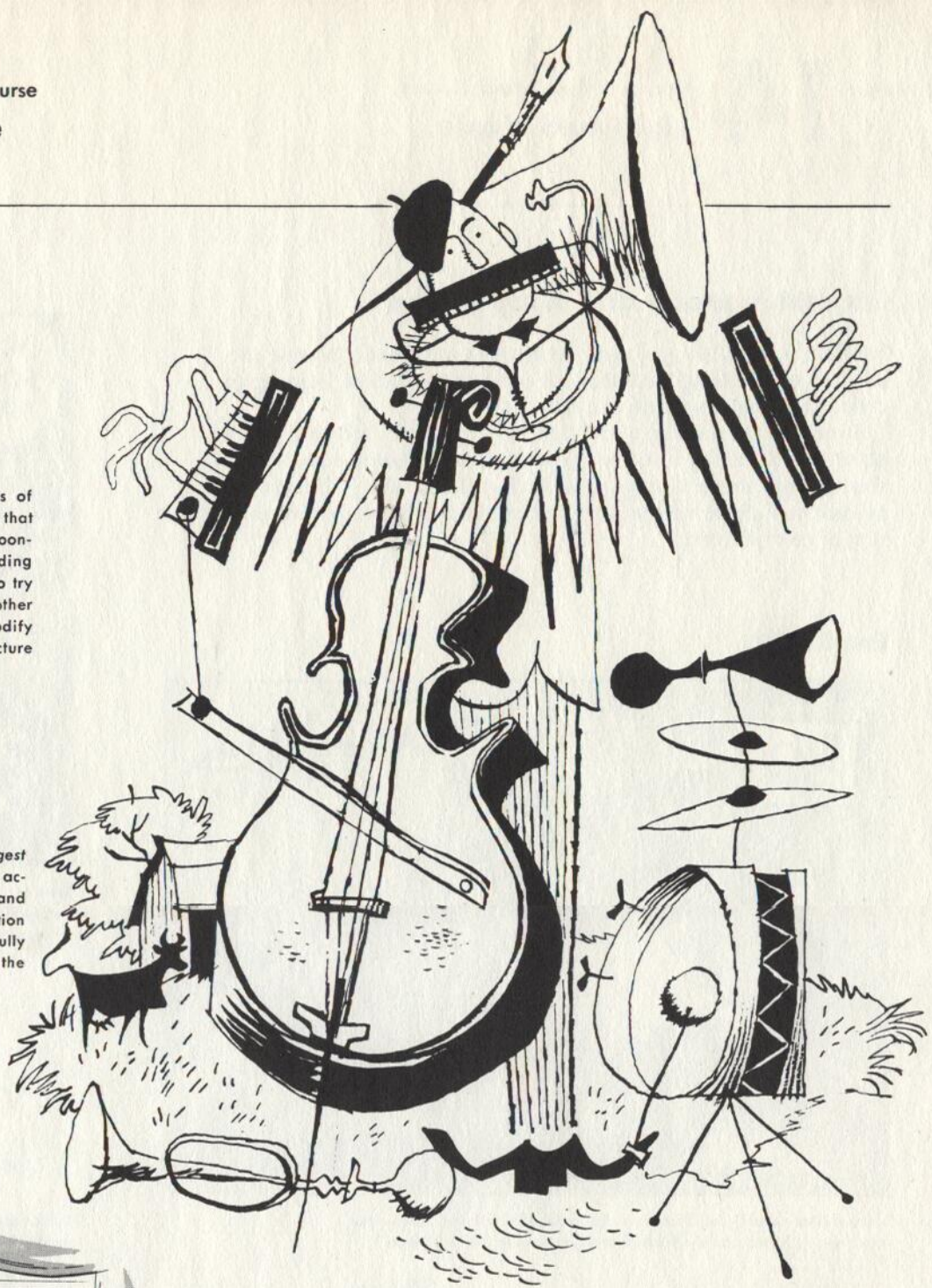
By adding shading and detail in the center and some blacks at the left to counterbalance those at the right, we now have a single unified picture



## How to use light and shadow in cartoons

On the preceding pages you have studied the basic rules of light and shade. Here we give you some examples to show that these rules need not always be taken too literally by a cartoonist. In each drawing there is a reason for breaking or bending the laws: to point up a gag, to help composition or simply to try and get a new effect. With light and shade, as with all the other elements of cartooning, you start with the real thing and modify or change it in whatever way helps make it a better picture

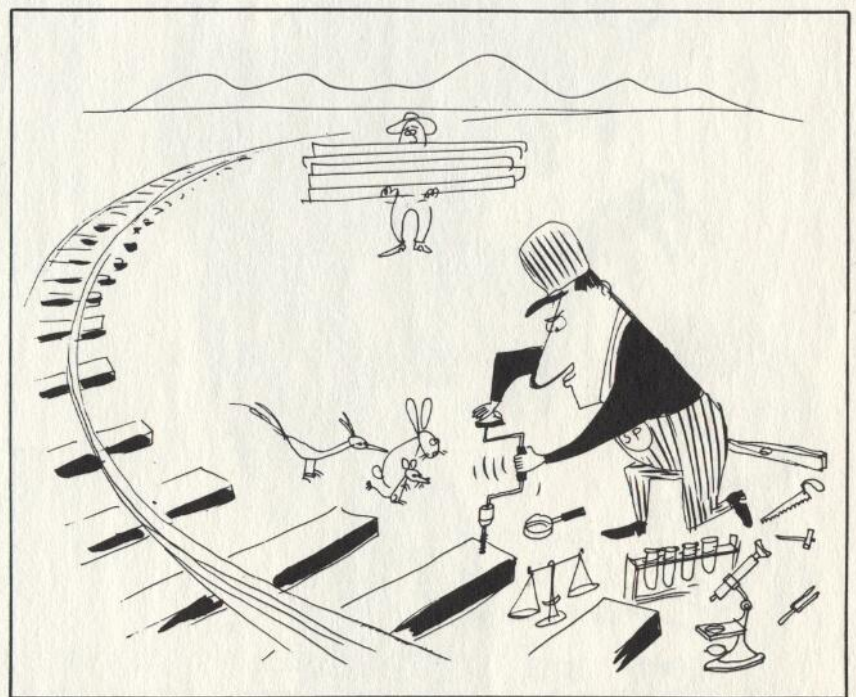
This decorative type of cartooning tends to suggest shading with thick and thin lines. Look at the accordion here: it's a good example of "lost" lines and thick and thin lines. This is not just simplification based on knowledge — the lines are also carefully considered to add excitement and action to the composition



Look Magazine

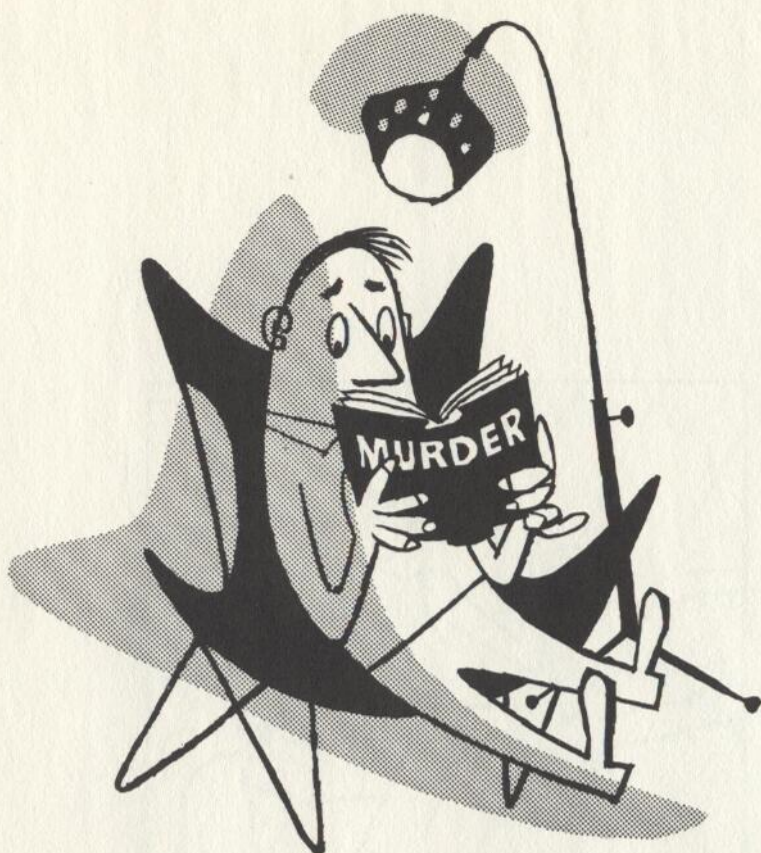
*Whatever became of old Knucklehead's last brain storm — installing inter-office television?*

See how Dick Cavalli emphasized the main ingredient of this gag — the television set — with shading. Here the shading tone (Ben Day) was indicated on the drawing with a light blue wash, later the mechanical tone was applied by the printer



To show strong sunlight on the desert Virgil Partch uses solid blacks. This makes a good perspective design on the railroad ties and calls strong attention to his character. Cross-hatch or small line shading here would weaken the drawing





Light and shadow are used here in a highly decorative way, but notice that this treatment still suggests a real light source

© 1955 by Whitney Darrow, Jr.



*Why don't you get in there and integrate with the group?*

Notice how Mr. Darrow has bent the laws of light and shade to give emphasis to the faces here. The characters' heads stand out as if spotlighted, although the light sources are behind and over them

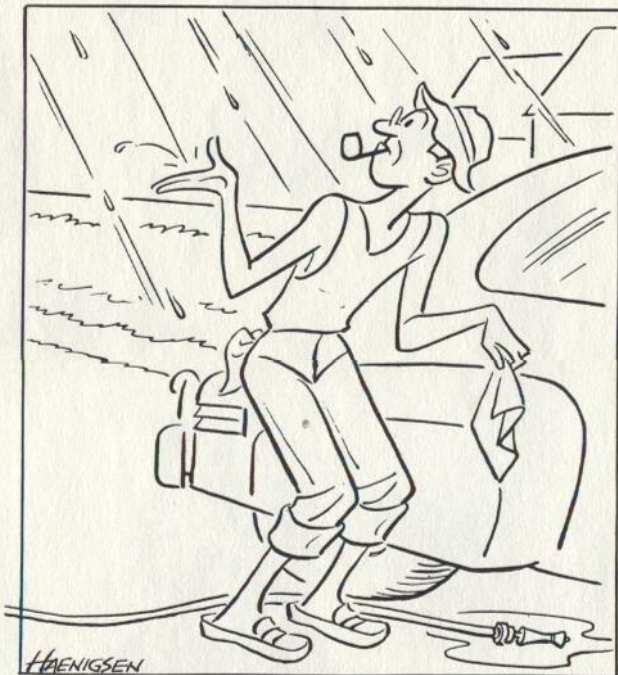


Whitney Darrow, Jr. thought of these figures in the simplest terms: light on one side, shadow on the other. He created the shadow with one big brush stroke, starting at the top of the head, going straight to the feet and outward for a ground shadow



**Warning!!**

We repeat: shading is fun and helps give your drawings that professional look. But — until you master it — take it easy. It is much better to under-shade than to over-shade.



Here we have a drawing finished in ink outline. We are now ready to shade it. Until you have done a lot of shading, you will find it a great help if you first pencil in the shading



If the face is the important part of your gag, these few blacks are all the shading you need to pull your reader's eye straight to the point. More shading would be a distraction. Small, solid blacks in a line drawing place emphasis where you want it



Here the car becomes important and attracts the eye first. We have shaded the important parts of the drawing just enough to give it some form and tone. If we're smart we will stop right now — clean our pen and put it away



See what we get when we aren't smart? We kept adding more and more shading. Sure it was fun — but it looks like a plate of spinach. The first drawing is a hundred times better than this — it's better not to shade at all than to do this



FAMOUS ARTISTS CARTOON COURSE  
Student Work  
Lesson 14

To study and practice

Our chief aim in this lesson is to teach you the essential principles of light and shade. Good shading gives your work life; bad shading will ruin it. You learn the laws and techniques of shading here, but you must also learn to judge what is the right amount of shading for the job in hand. Always keep in mind the market you are aiming at, the methods of reproduction and quality of paper that will be used in printing your work.

For your practice work, create several cartoons, each with a definite light source, and draw your shading and shadows in proper relationship to it. Then do the same drawings over with the light source at a different point to see how the rules work and if you can improve the looks of things. Try all types of shading and try solid blacks, but remember that simplicity is the best policy for cartooning. When you feel you understand the subject, tackle your assignments.

We will criticize your assignments for this lesson chiefly on your understanding of the principles taught in the text.

The assignments you are to mail to the School for criticism

ASSIGNMENT 1

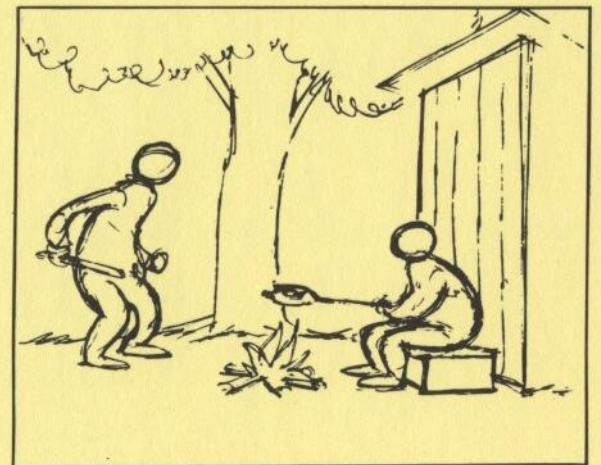
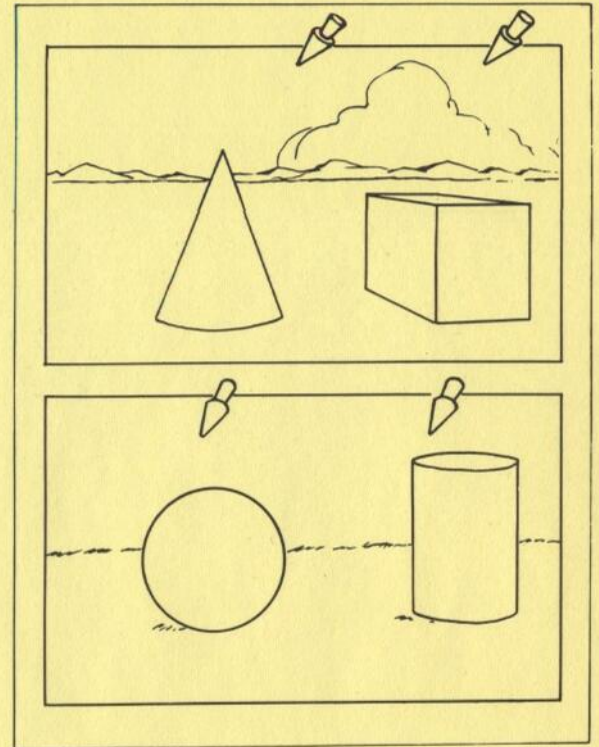
On an 11 x 14-inch sheet of Bristol board draw two panels, each 10 inches wide and 6 inches high, as in the diagrams at the right. In the upper panel draw an Indian tepee and a flat-roofed Mexican adobe hut standing on a flat level plain in the same placement as their basic forms in the top diagram. They are in strong sunlight, with the light rays coming down in the direction and angle indicated by the three-dimensional arrows. Shade these dwellings and draw the cast shadows to this light direction in ink, using pen or brush.

In the lower panel draw a large beach ball and a garbage can resting on grassy ground and follow the same procedure as in the drawing above -- noting carefully the light direction.

ASSIGNMENT 2

On another 11 x 14-inch sheet of Bristol board draw a panel 10 inches wide and 8 inches high. In it draw the figure of a tramp seated on a box, his back to the wall of a shack. He is cooking a stolen chicken over a campfire at night. At the other side of the fire draw the figure of the local constable, who has just entered the scene and caught the tramp in the act. The campfire is the only source of light in the scene, so shade your figures and objects accordingly with either brush or pen. Try to give the figures action and facial expression which will make the situation as interesting, dramatic or humorous as you possibly can. You may use the sketch at the right for figure placement or, if you wish, come up with your own composition.

IMPORTANT - Mark this sheet ASSIGNMENT 2.



Present your assignments in the same clean, professional manner you would use if you were submitting them to the cartoon buyer of a publication. Letter your name, address and student number carefully in the lower left-hand corner of each page. In the lower right corner, place the Lesson Number and Assignment Number. Mail to:

FAMOUS ARTISTS CARTOON COURSE  
Westport, Connecticut

BE SURE to fill out the return shipping label and enclose it with your assignments. This helps a lot in getting your assignments back quickly.



**Famous Artists Cartoon Course**

**Westport, Connecticut**

# **Props and backgrounds**

Lesson

# **15**

Rube Goldberg

Milton Caniff

Al Capp

Harry Haenigsen

Willard Mullin

Gurney Williams

Dick Cavalli

Whitney Darrow, Jr.

Virgil Partch

Barney Tobey



Drawing by B. Tobey

© 1956 The New Yorker Magazine, Inc.

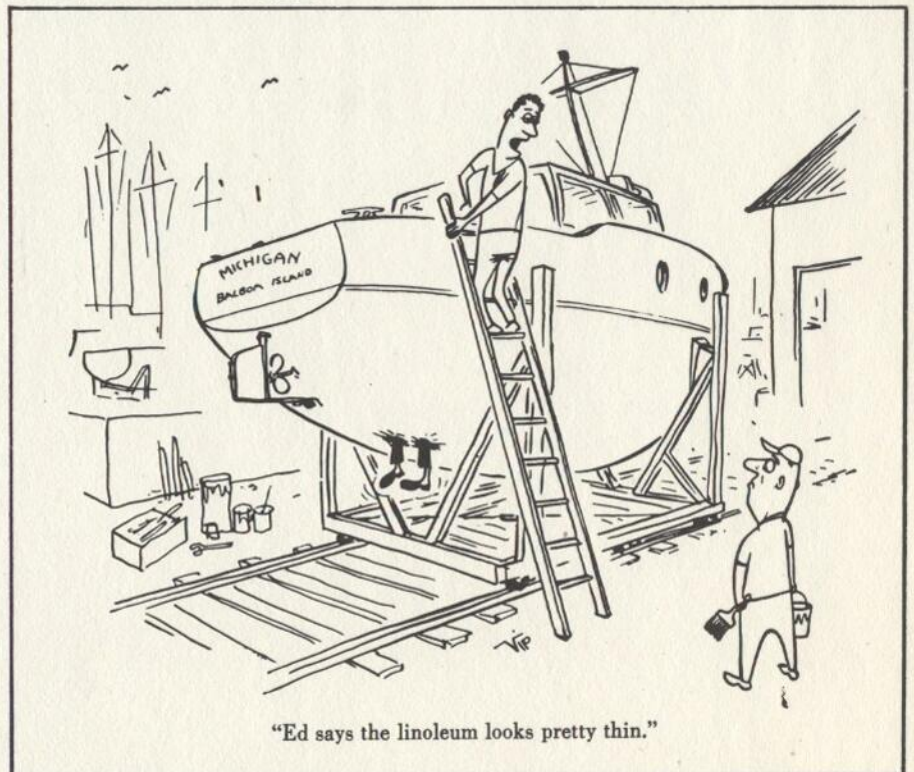


"This neighborhood sure has changed since I was a kid."

Props that set the stage for these cartoons range from a simple hole cut in the ice, suggesting the Arctic background, to an elaborate rendering of buildings portraying a New York street scene. In the former, the background serves merely as a stage setting and is subordinate to the figure. In the latter, it is the whole point of the gag and consequently it dominates the "actors."

It is up to you as a cartoonist to determine what props you need to tell your story effectively and then, using reference material, to draw them accurately enough to be recognizable to the reader.

Courtesy True, The Man's Magazine



"Ed says the linoleum looks pretty thin."

© 1963 The New Yorker Magazine, Inc.  
Drawing by Whitney Darrow, Jr.



"What type is your mother?"





## Props, details and backgrounds

As we have said before, the panel is your stage and it is here that your characters will act out the parts you have planned for them. To help tell your story and give atmosphere, you must build up a background for your actors. You do that by using props. "Props," a contraction of the word "properties," means anything put into the panel other than the figures. Clouds, trees, furniture, mountains, rocks, water, etc., all are props. It is the combination of these props that sets the scene for your story. Details are the small parts of the prop. A table is a prop. Carving on the legs of the table would be detail. An automobile is a prop. The headlights, steering wheel, wheels, windshield — these are all details.

You could draw a cartoon strip without any backgrounds, but it would only make the telling of your story twice as difficult. Your reader could recognize a farmer by his dress, but that same farmer would be twice as convincing in a barnyard, or driving a tractor. By the same token, a clown belongs with a circus background. When drawing a background, it is important to achieve a sense of realism. No matter how well the drawing is done, if it lacks authenticity or realism, your drawing will not serve its purpose.

Most beginners think that by drawing a great deal of detail they can achieve realism in their background. This is not true. Sometimes the whole feeling of a background can be lost because the artist tried for too great a sense of detail with his props. A steamshovel is a wonderful prop, and is built up of many thousands of small details. If a cartoonist were to draw a steamshovel in his background, complete down to the last detail, it would become so important that everything else in the picture would be lost. Here, as in all other branches of cartooning, simplicity is the keynote. You have already learned how to simplify the

human form — now you must apply the same rules to props and backgrounds.

As a cartoonist, it is of vital importance that you familiarize yourself with as many types of backgrounds as possible. When you buy a handle for the faucet, take a look around. Notice the props and details in the plumbing shop. They are not the same as in the drugstore or the public library. Every trade or occupation has its own tools. Learn to see, observe and *remember*.

Trees, grass, shrubs and general landscaping vary throughout the world. A cartoon gag with an Eskimo as the key figure wouldn't be very convincing surrounded by palm trees and soft, white sand. Types of landscape are especially important in the adventure type strip. There the artist is continually striving for realism, and readers will be very critical of any detail in the backgrounds that does not fit in with the story. Here your morgue plays an important part. Most of us cannot travel all over the world to collect backgrounds for our cartoon features. But we can build up our morgue so that we have a complete range of landscapes for practically any part of the world.

In some successful strips you will notice an occasional panel with no props at all — only a figure and a balloon. But that is done only where the setting has been well established in the preceding panel, and the *story* needs further clarification. The omission of props here and there takes experience and rare good judgment. Don't underestimate the importance of props. They must be there — in your reader's mind — whether you draw them or not!

In this lesson we have given you as many examples as possible of props and details in a small space. Study them and copy them. They are here for you to use.

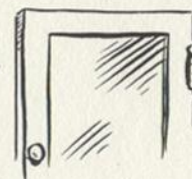


## Props and details

In this lesson, simplification means leaving out unnecessary details in props. For instance, if your character is honking the horn of an old car, you should draw the little horn button. If he's just driving the car, the black horn button might stick out like a sore thumb — so leave it out.



Details are small parts of a prop

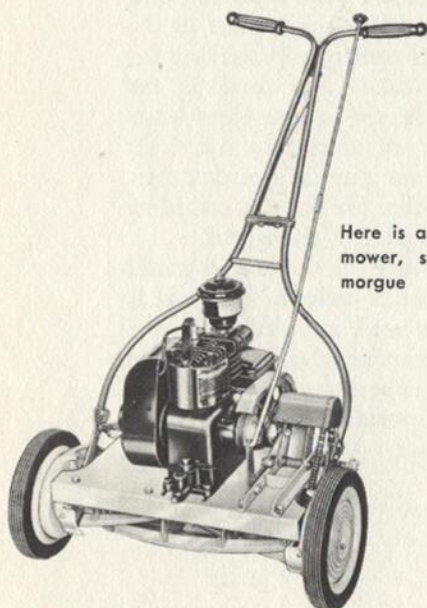


## An example of simplification

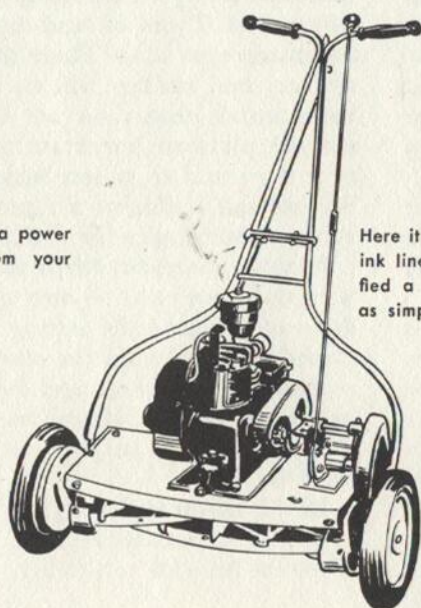
Below is a photo of a power mower, like the one you probably have in your morgue, and would use as a guide for your drawing. Of course, you could spend hours copying every detail, putting in every nut and bolt. This would be great if you were selling lawn mowers — but you are not. All you want is to let your reader know that it is a lawn mower. Maybe you're the type that's just nuts about drawing lawn mowers — don't get carried

away. Simplify, *simplify* and let your reader's imagination fill in the details. If you draw the lawn mower in complete detail, and the other props in the panel are simplified, your lawn mower will be out of key with the rest of the drawing.

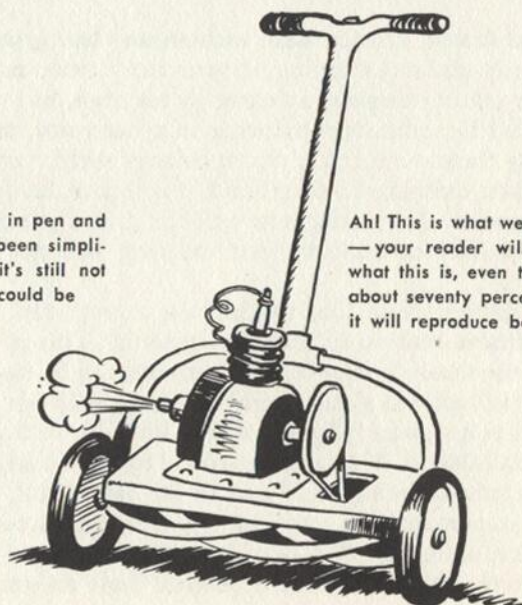
Too much detail in a prop is like long-winded wordage in a story. You will lose your reader if you bore him with unnecessary details.



Here is a photo of a power mower, straight from your morgue



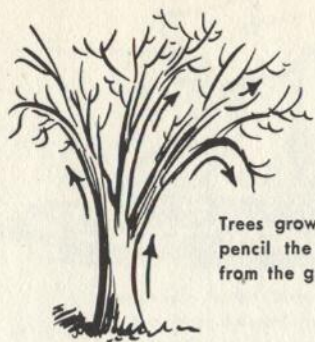
Here it is drawn in pen and ink line. It has been simplified a bit, but it's still not as simple as it could be



Ah! This is what we have been working for — your reader will have no doubt as to what this is, even though we have cut out about seventy percent of the detail — and it will reproduce better



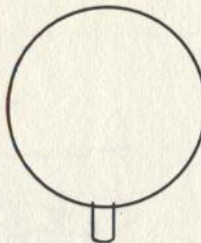
## Trees



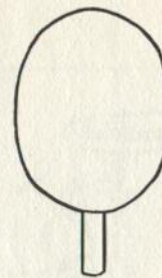
Trees grow up—so it helps to pencil the trunk and branches from the ground up



Cone



Sphere



Oval



Half sphere

Trees, too, have basic forms. Remember that the trunks vary in length and are cylinders



Summer



Fall

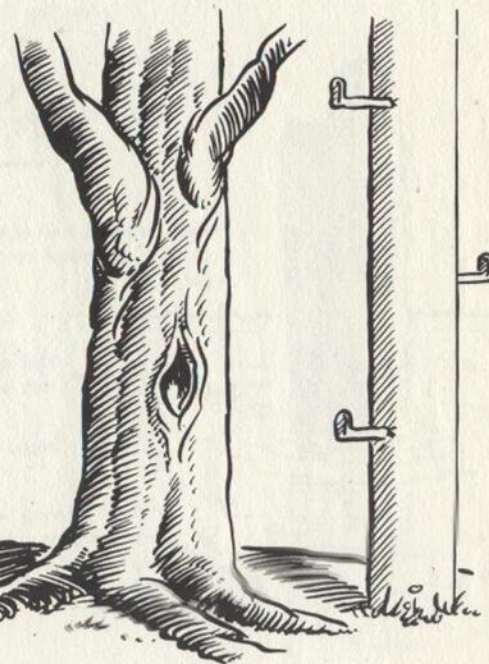


Winter

Because the branches hold the leaves in the summer, the bare branches in the winter must fill the same area the leaves did



Wrong



Right

A tree isn't like a post stuck in the ground—a tree spreads out at the base for a firm footing



Oak

Birch

Palm

Cypress

You're not expected to be a botanist—but you should know one tree from another so you won't draw a palm top on a birch trunk



Don't try to draw every leaf on your trees



Keep them simple, with over-all shapes in mind

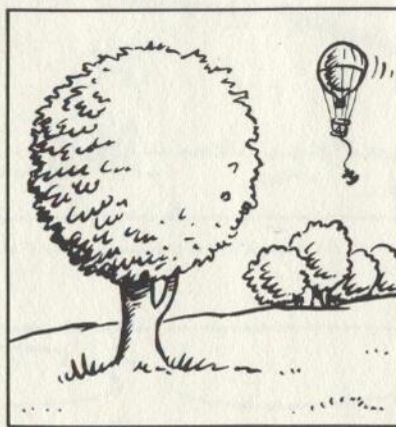
Both the tree trunk and the pole are cylinders, but the trunk is rough and the pole is smooth—it is with pen lines that we show texture of the trunk



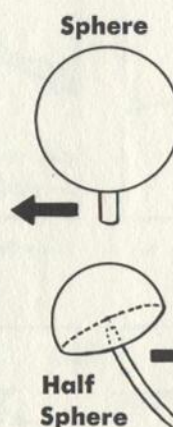
The pine tree is a cone with a straight trunk



Cone



The maple and most shade trees are spheres

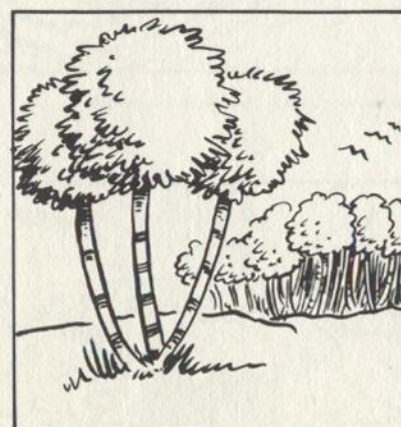


Sphere

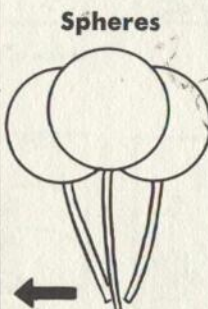
Half Sphere



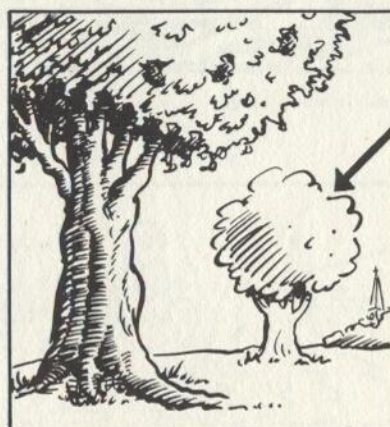
The palm is a half sphere with a long narrow trunk—most of them lean because wind makes them grow that way



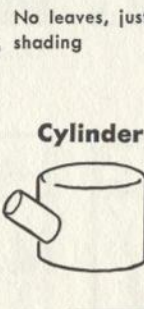
Birches are spheres—they grow in groups



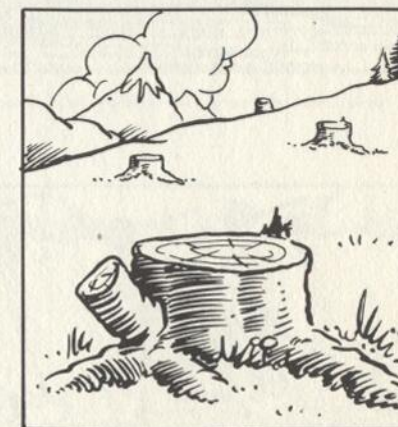
Spheres



A tree drawn in the foreground will have much more detail than one drawn in the distance



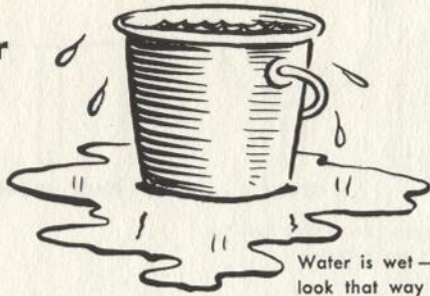
Cylinder



Remember that stumps are cut-off trees—give them the same rough textures



## Water



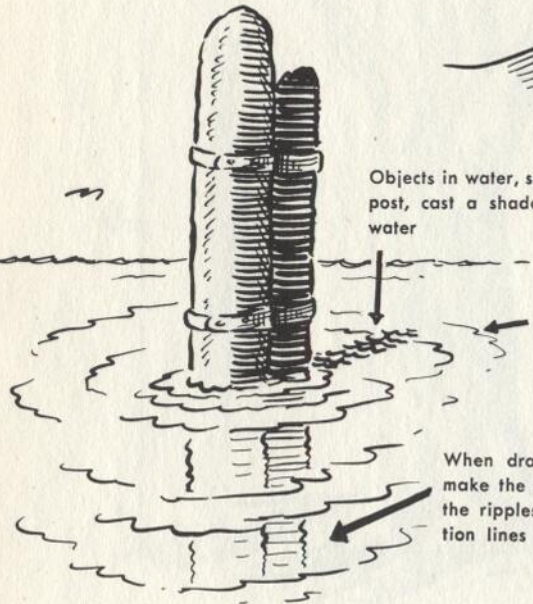
Water is wet — make it look that way by making it shiny



When objects float in water, only parts of them show above the surface



Dirt and water make mud. When drawing mud, make it look gooey and liquid

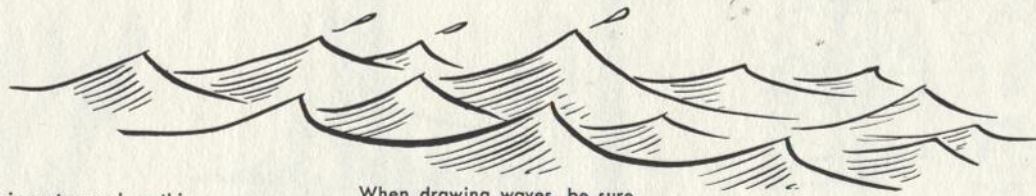


Objects in water, such as this post, cast a shadow on the water

Ripples in water go all the way around the object

Water acts like a mirror

When drawing a reflection, make the line wavy and let the ripples break the reflection lines

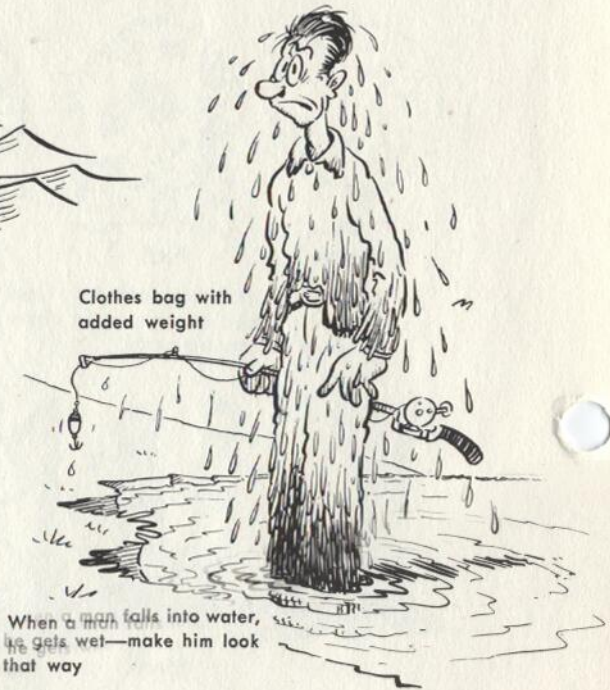


When drawing waves, be sure to shade them all on the same side



Sweat and tears are water

Heat, worry and fear can be shown by sweat

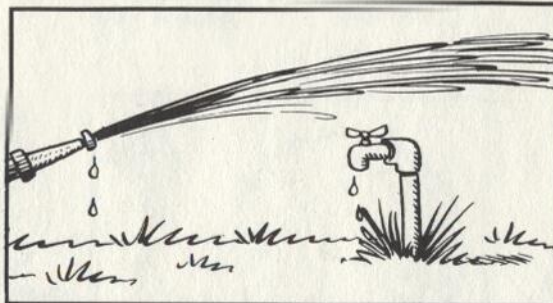


Clothes bag with added weight

When a man falls into water, he gets wet — make him look that way



When you draw a bucket of water, put some water on the floor around it



The water from the hose is under pressure — make it shoot out



This is a lazy stream — the water flows slowly and shows reflections



Waves curve over themselves — shading will show this



Ocean water is drawn rough



Inside a harbor or a lake, the water is smooth



The water from falls is pulled down by gravity — the higher the fall, the bigger the splash



Small objects make a small splash with ripple rings around it



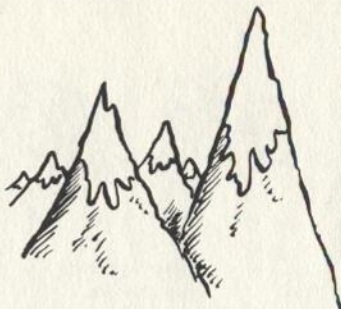
When a large object falls into water, there is a big splash



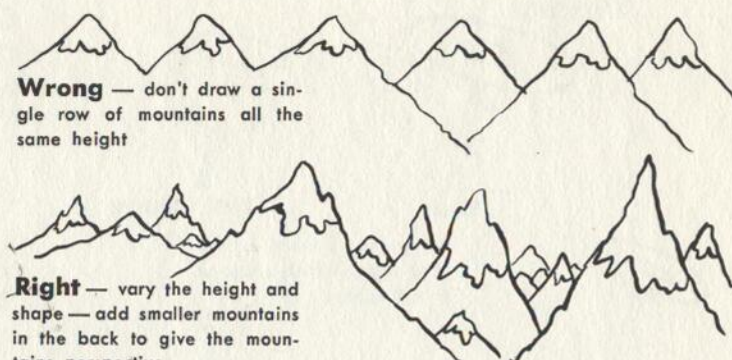
## Mountains



Hills are old worn-off mountains and are smooth and flowing

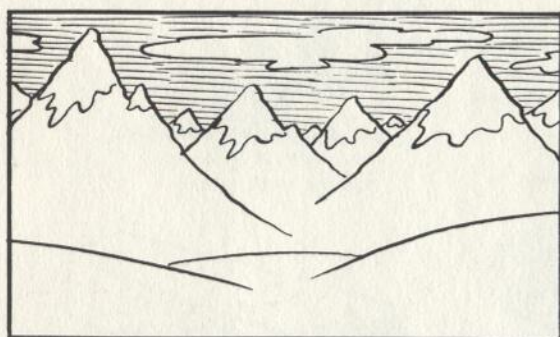


High mountains are new mountains and are rough and sharp

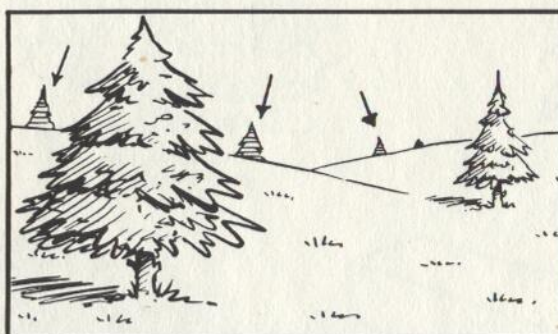


**Wrong** — don't draw a single row of mountains all the same height

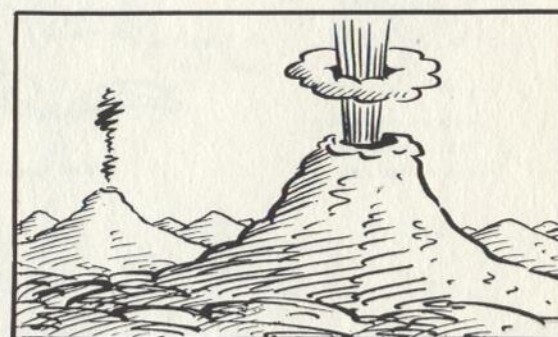
**Right** — vary the height and shape — add smaller mountains in the back to give the mountains perspective



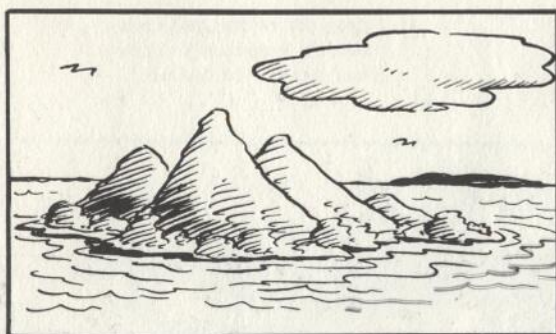
High mountains have snow on their peaks all year



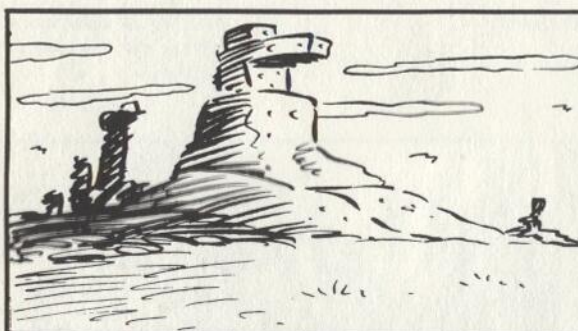
When drawing trees on hills, give your hills perspective by drawing the tops of the trees growing on the other side



Volcanos are mountains that have blown their tops — have smoke coming out the top



Islands are the peaks of mountains sticking up out of the water

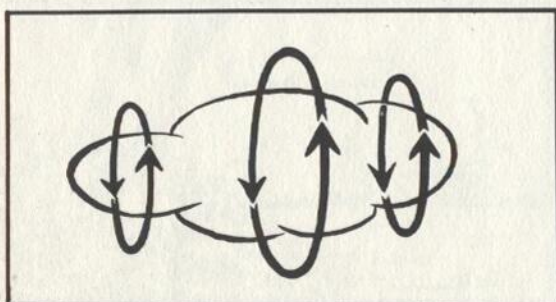


In the desert, the wind and rain have worn the mountains into weird shapes



You don't have to draw all of a mountain in a panel

## Clouds



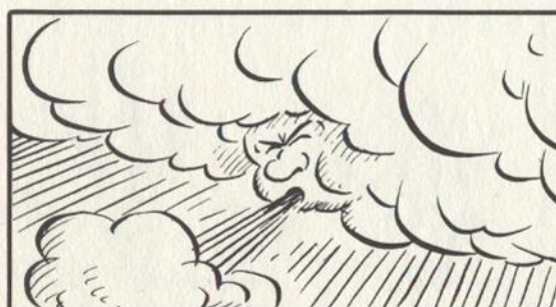
Clouds are round — when you draw them, keep this in mind and shade them accordingly



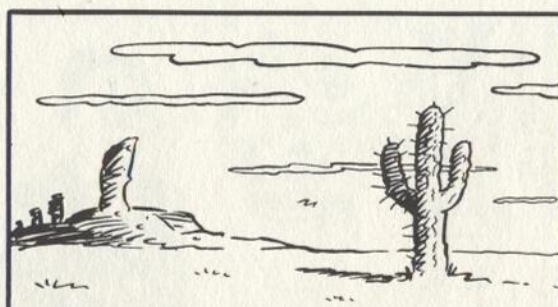
Before a storm, black clouds gather and the sky becomes dark



During a storm, there is rain and lightning



One way to show the wind blowing is to form the clouds into a face



Desert clouds — long and narrow — note clouds get smaller in distance



This is another use for a black storm cloud



## Plants



Disc



Half sphere

Flowers are usually of two basic forms, either a disc or a half sphere



Flowers drawn from the disc

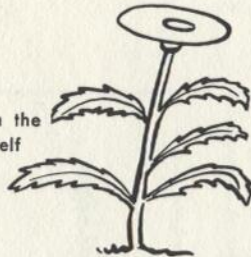


Flowers drawn from the half sphere



Leaves come from the ground with the flower stem

Or from the stem itself

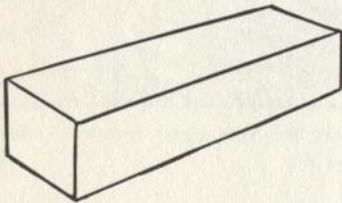


Don't try to draw all of the leaves

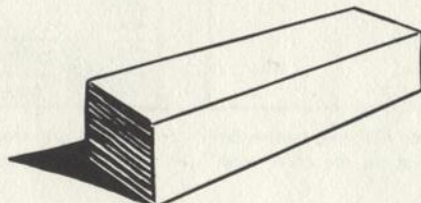
A bush is just the same as a tree without a long trunk



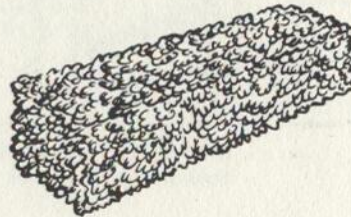
Just indicate the leaves and the rough outline



The basic form of a hedge is a cube



Shade it the same as a cube



Don't try to draw too much texture into it—you'll lose the shape



Make the outline rough and indicate leaves on the side and very few on the top



When drawing a row of small bushy plants, remember the perspective—they get smaller in the distance



In drawing open country, a silhouette can establish distances



Cattails grow around water—be sure to draw in their reflections on the water



When drawing a field of daisies keep the perspective by having those in the distance smaller



In the tropics the plant life is dense—use solid blacks in the foreground



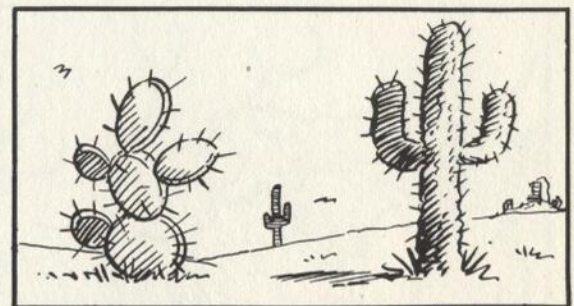
Leaning tree and shadowed leaves make a graceful, decorative scene setting



A few flowers spotted in a window box can make that hole in the wall interesting



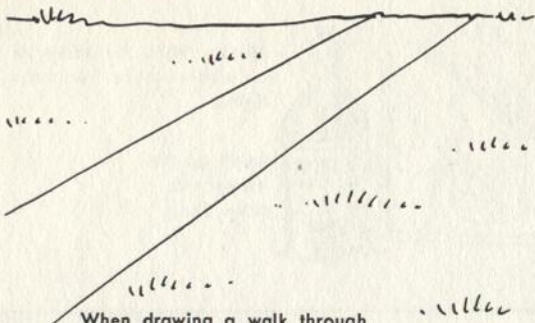
Plants and flowers can help establish mood of place or person



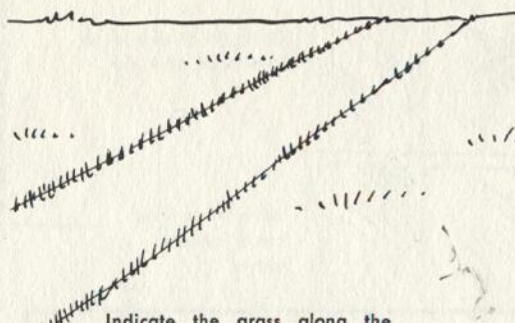
Two types of cacti—made up of flat discs and cylinders



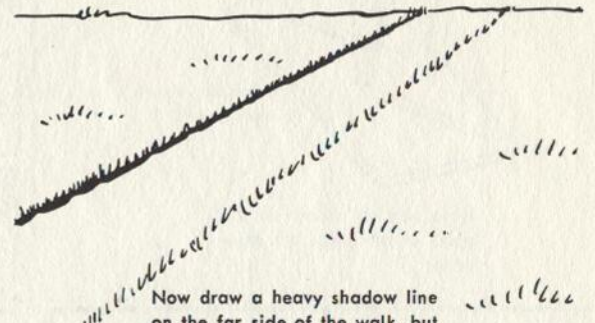
## Grass



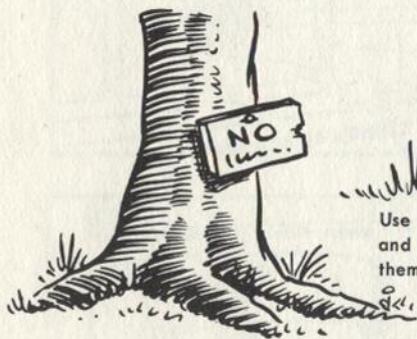
When drawing a walk through grass, pencil the walk first



Indicate the grass along the edges of the walk



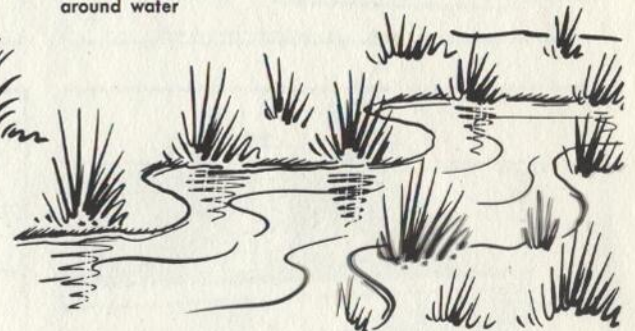
Now draw a heavy shadow line on the far side of the walk, but let the grass tips show above it — this gives the grass depth



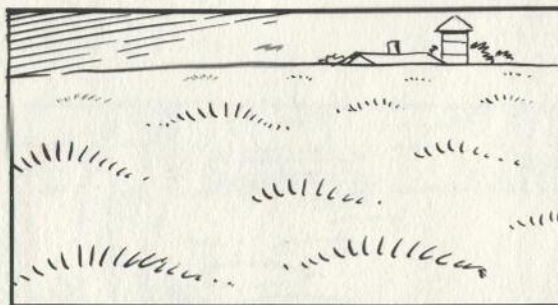
Use grass around trees, rocks and other objects to help plant them firmly in the ground



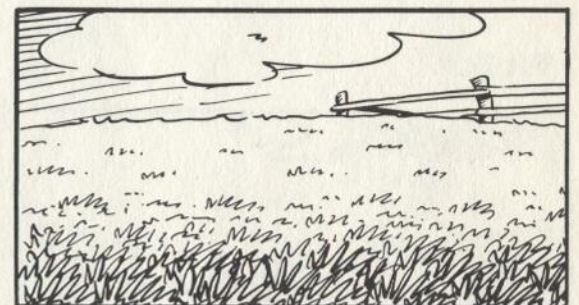
Grass always grows longer around water



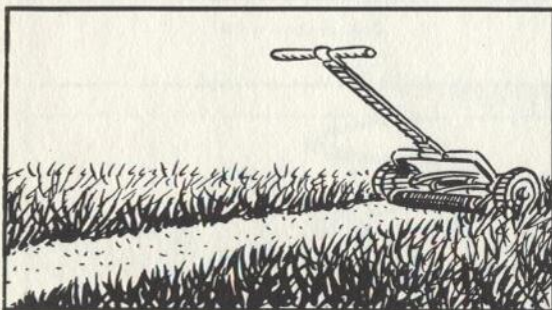
Grass grows over the edge of a bluff — show this by drawing in shadows under the grass



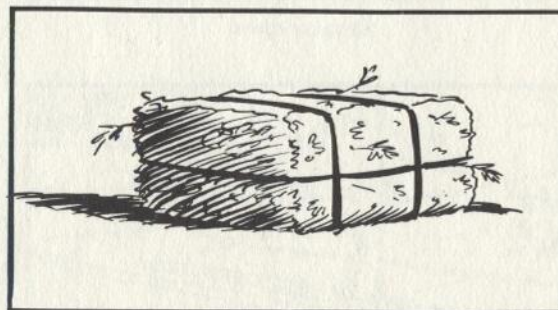
Wild field grass grows in hummocks — show this by curving the lines of the grass



In drawing a field of leafy grass, make horizon line rough



Lawnmower makes a path through grass — a few light lines indicate path of mowed grass



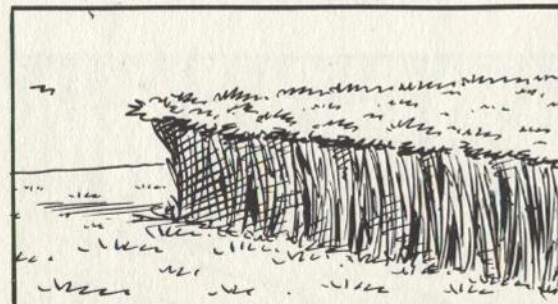
A bale of hay is compressed grass — a few stems sticking out of the cube indicate this



When drawing a shadow in grass, keep it in character by making the grass itself darker



Grass around steps — the grass on the right side hides the steps



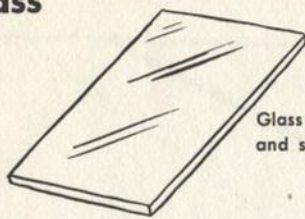
Grain is long-stemmed and bushy on top — note the bushy tops are suggested in outline



Haystacks and bunched corn — the stack is top heavy because cows eat at the bottom

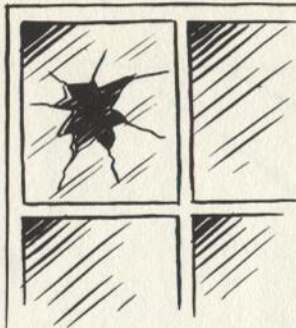


## Glass



Glass is smooth  
and shiny

Note straight lines across  
glass at an angle for shiny  
effect



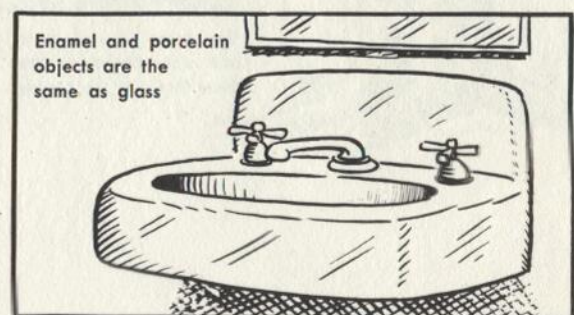
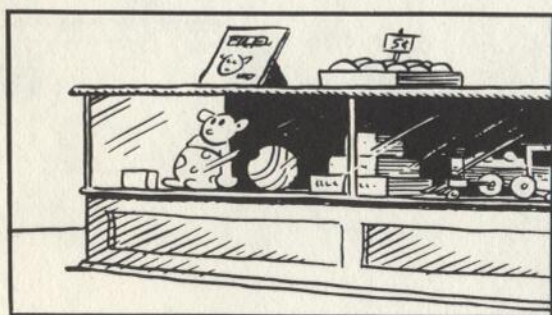
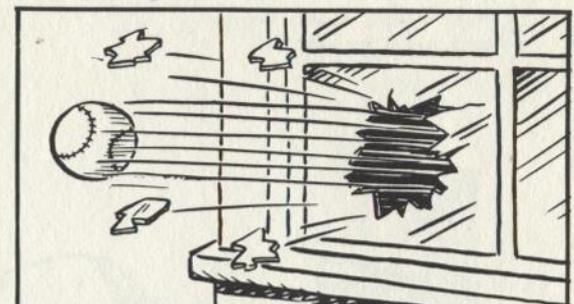
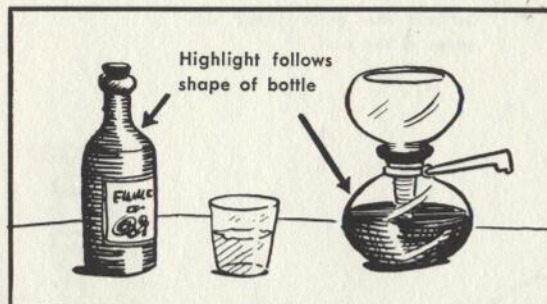
Cracks in glass radiate  
from point of break

Make shine lines  
heavy in one  
corner



Mirrors reflect the image of  
an object—make the image  
lighter

Break up the  
image with  
shine lines



Enamel and porcelain  
objects are the  
same as glass

## Walks



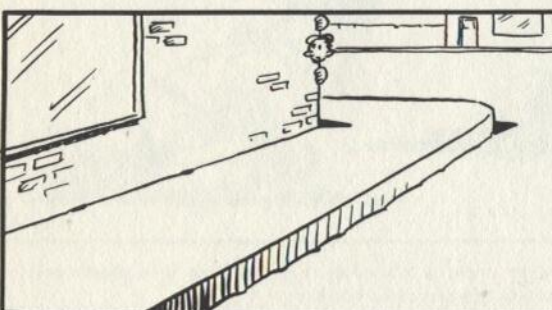
Dirt path



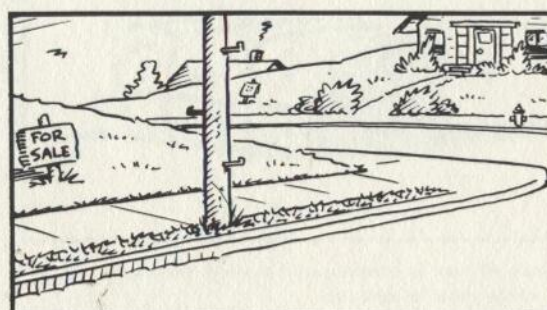
Stepping stones



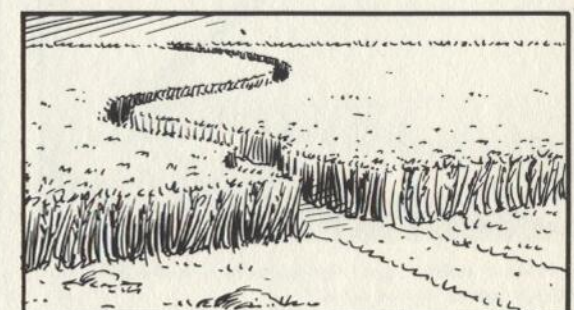
Path around a hill



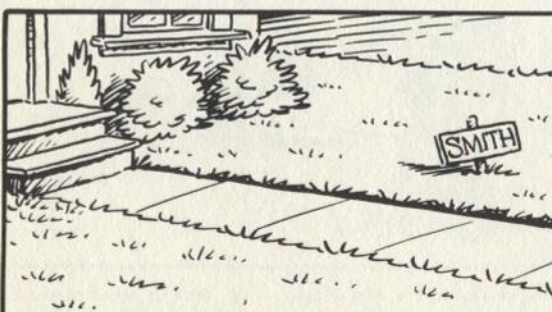
Sidewalk and corner



Every sidewalk has a fire plug



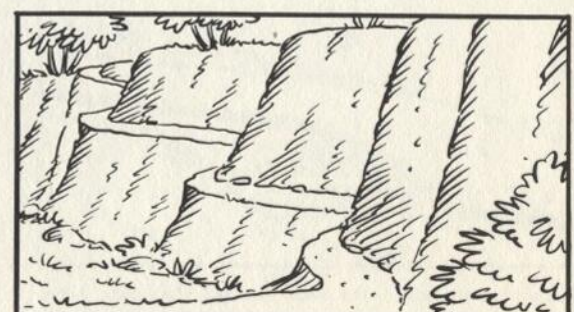
Path through high grass



Cement house walk



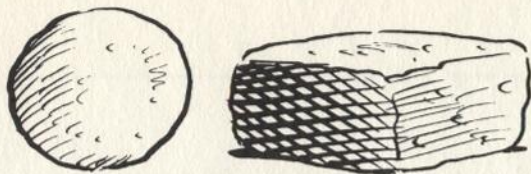
Path through trees



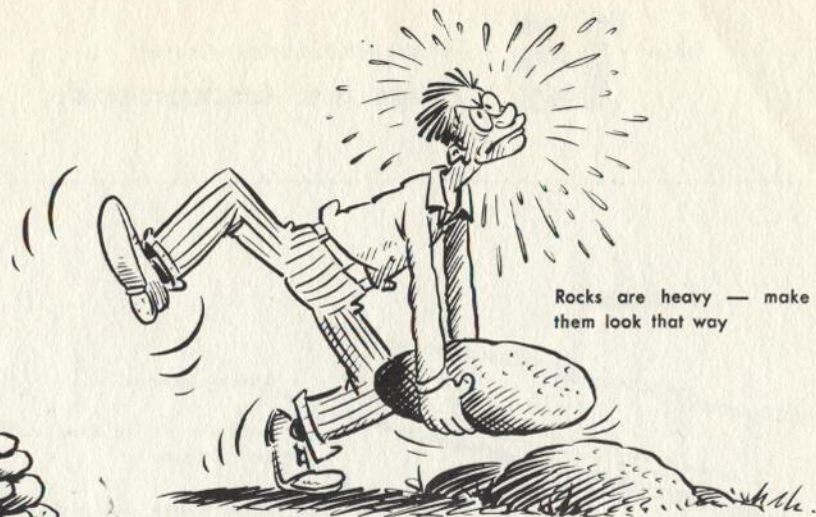
Path on side of bluff



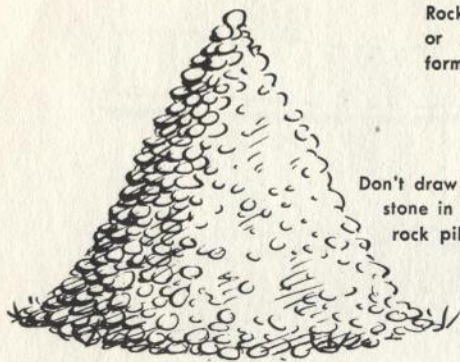
## Rocks



Rocks can either be spheres or cubes in their natural form

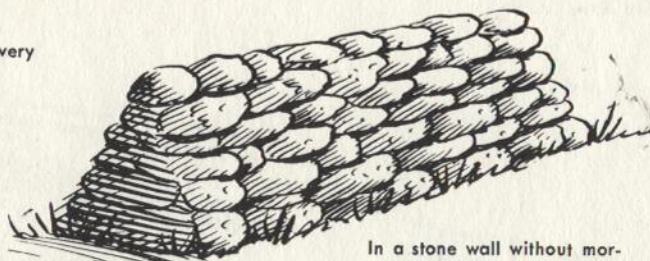


Rocks are heavy — make them look that way



Don't draw every stone in a rock pile

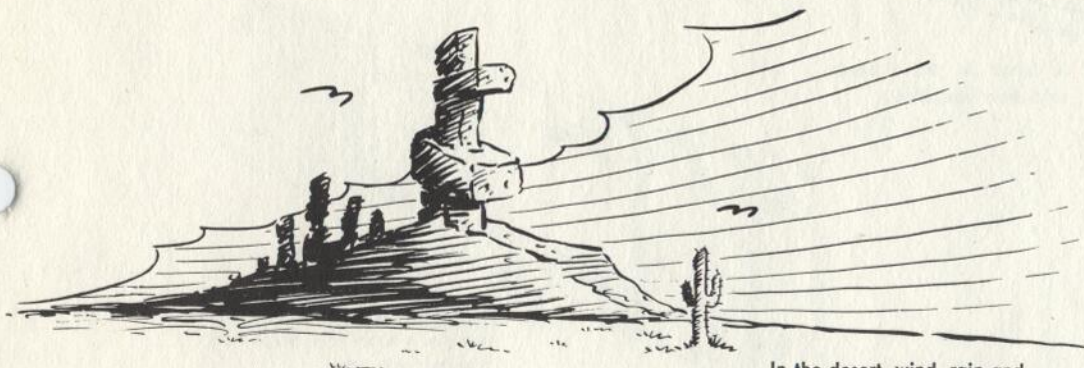
Treat them the same as leaves on trees and bushes



In a stone wall without mortar, the rocks will touch each other



In a stone fence or wall built with mortar, there is a space between the stones



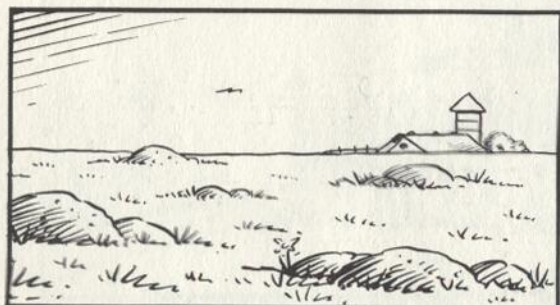
In the desert, wind, rain and sand have carved rocks into almost any shape you want to draw



Wrong

Rocks in the field never sit on top of the ground—they will look as if they belonged there if you show only part of them above ground

Right



Half-buried field rocks — make them look solid



Fieldstone fireplace—rocks are spaced by mortar between them



Rocks in stream break flow of water — lines stream around and behind them



Square, rough rocks — shade them right — decide where light is coming from



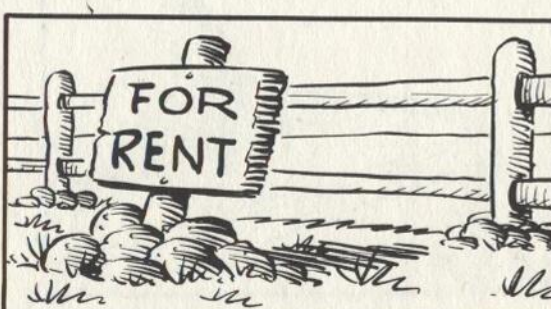
Draw small rocks in a dirt path



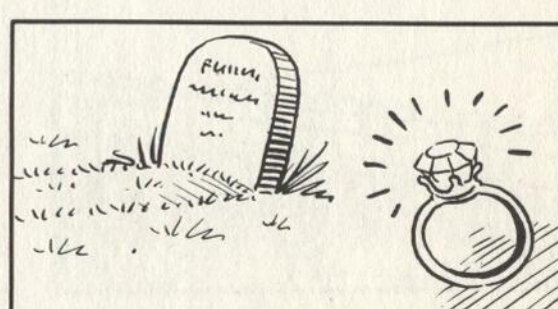
Prison wall



Rounded shore rocks — have waves break over the rocks



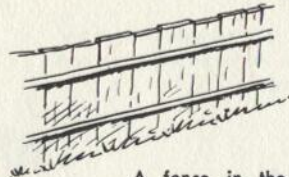
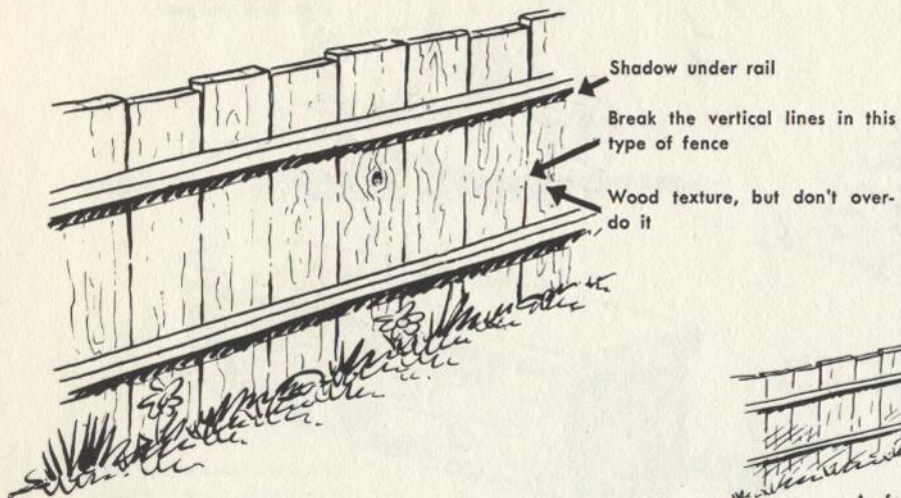
Rocks are used to hold things down — and up



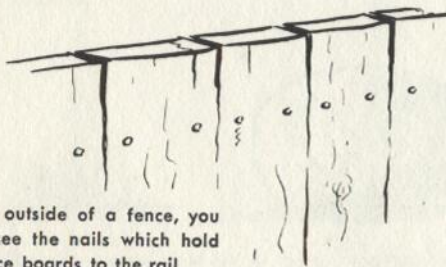
Two more types of rock or stone



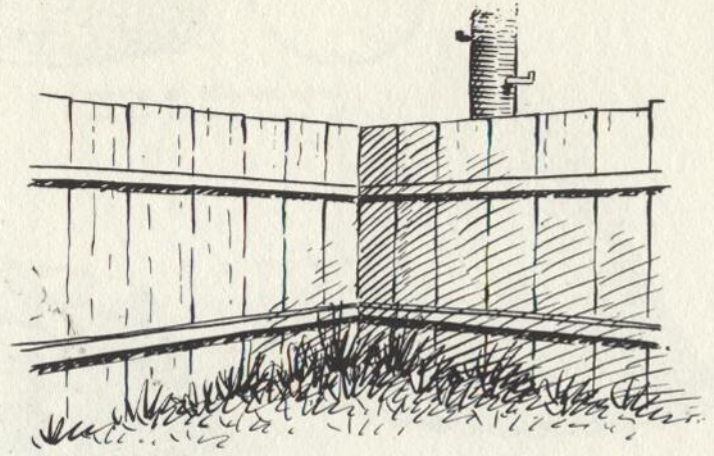
## Fences



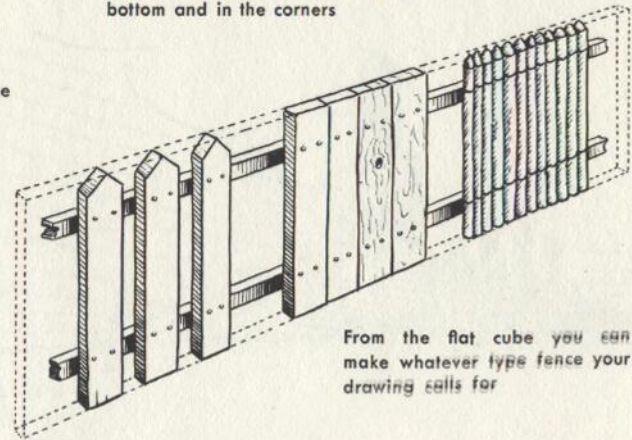
A fence in the distance will show less detail



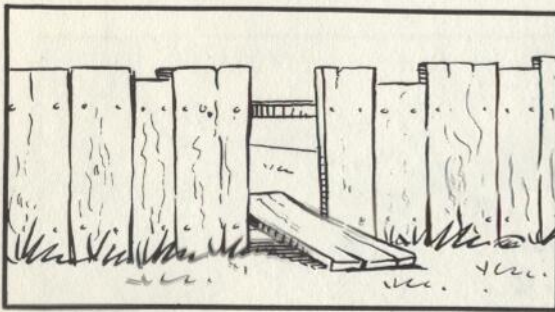
On the outside of a fence, you would see the nails which hold the fence boards to the rail



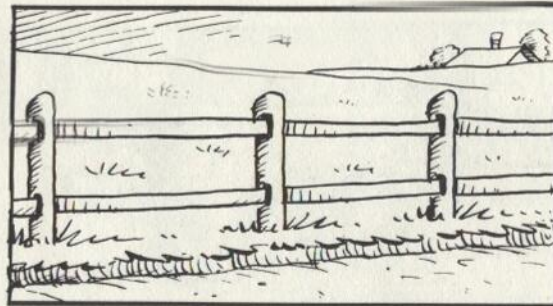
Hook the fence to the ground by darkening the grass along the bottom and in the corners



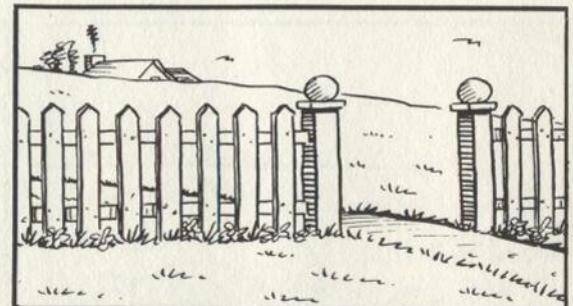
From the flat cube you can make whatever type fence your drawing calls for



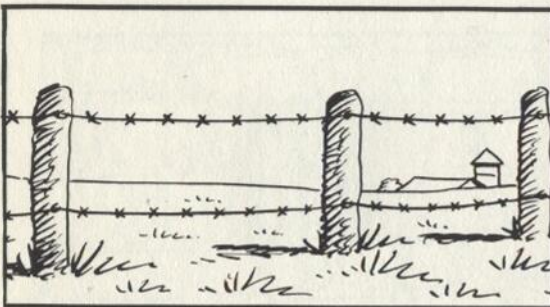
An old board fence — make boards different lengths



Post and rail fence — this type is found in the country — note grass used as a shadow



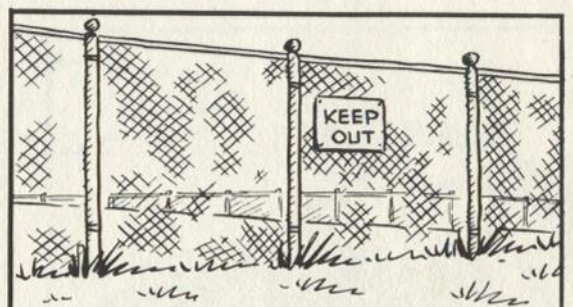
Picket fence — for small homes — draw flowers growing along this type



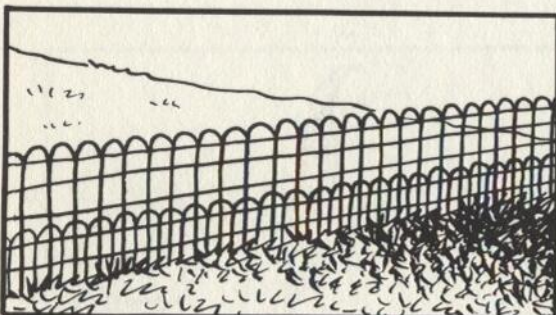
Barbed wire fence found on farms and in the West



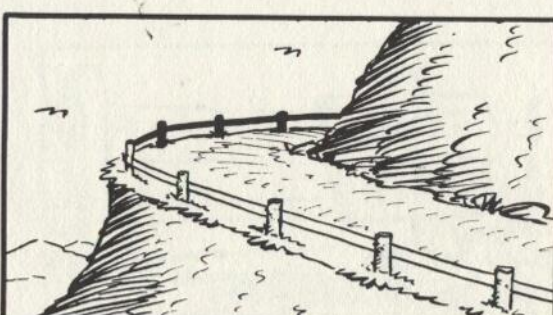
City board fences are covered with signs and writing



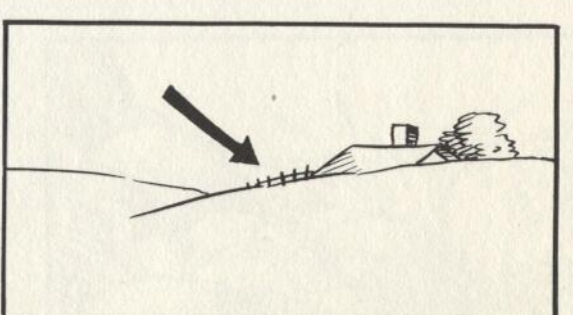
Wire screen fence — factory type — just suggest screen — don't try to draw every wire



Wire picket fence — okay in small hunks, but be careful of over-doing it



Guard rail fence — low and strong — found along mountain roads



A fence like this will add interest to buildings in the distance



## Buildings

You will draw very few cartoon panels that haven't at least one building or part of a building in them. Not only should you have a good picture-idea of the outside of a house, but you must also be familiar with the appearance of other types of buildings. There are many little differences which you should notice. The window in a house is not the same as the window in a factory.

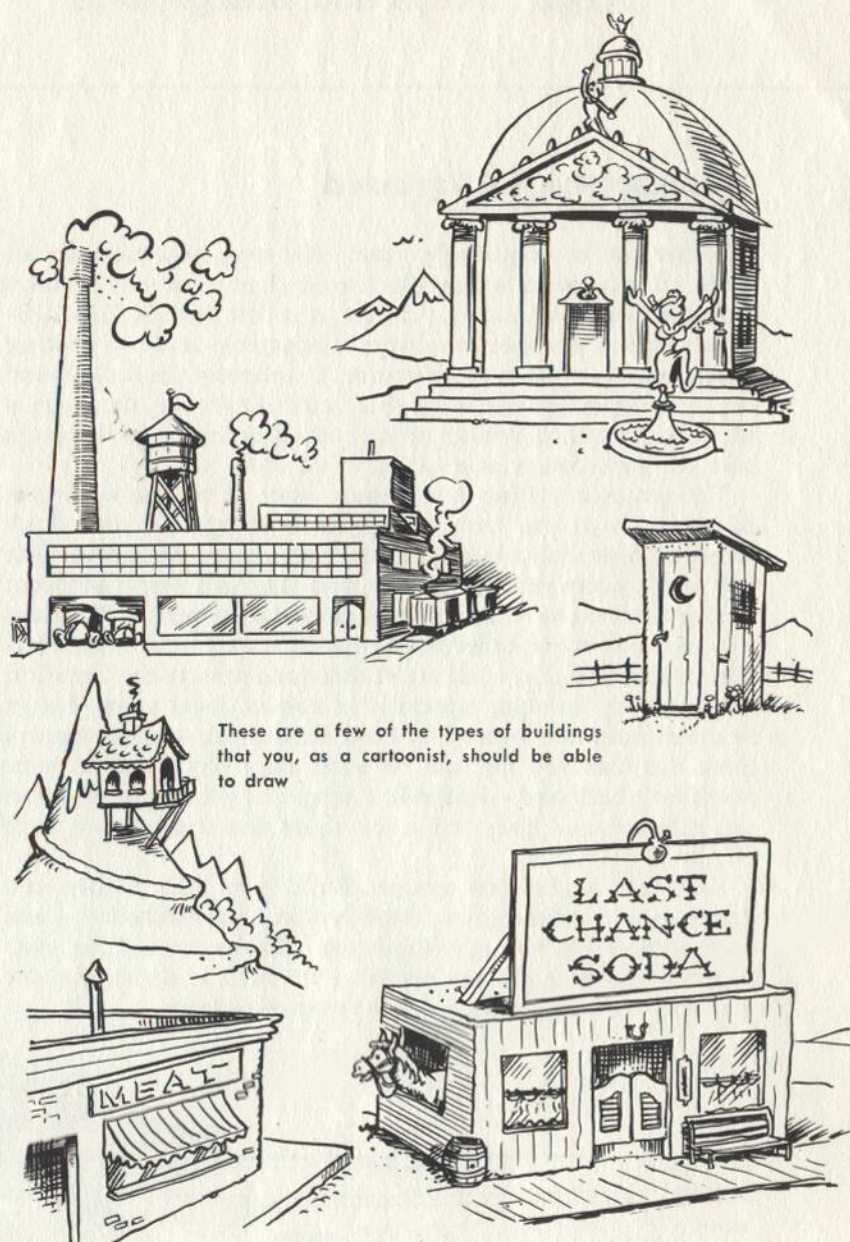
For your morgue, clip as many kinds of buildings as possible—inside and out. The home and garden magazines are wonderful places to find pictures of this type. For industrial-type buildings, look at the ads and borrow any trade magazines that your friends have. Trade magazines not only have buildings, they have photos of machinery and other industrial equipment.

Remember that most buildings are cubes in their basic form. When you draw them, simplify them, just as you did with the lawn mower. Don't try to draw every brick in a brick building. Just put in a few so your reader will know it is a brick wall. It's the same with windows. When you are drawing a building in the distance, just indicate a few of the windows and the door.

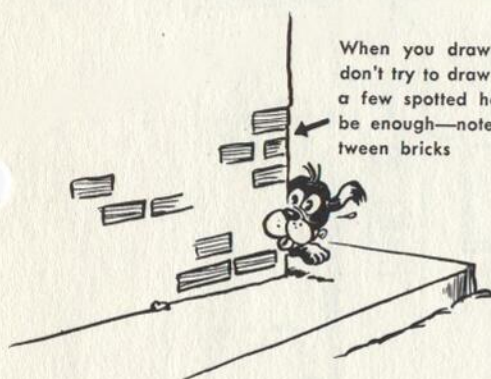
Take every opportunity to study the inside of houses. For example, notice the way a door is framed, not because you are going to draw it in complete detail, but because it is much easier to draw something if you know how it is made.

Both the insides and outsides of houses are like people. Over the years they will take on character. You will find that your readers will expect certain types of characters to live in certain types of houses. This also applies to locations. A southern California bungalow is entirely different from a New England farmhouse. Both are houses, and people live in them, but because of climate and background, they are entirely different in appearance.

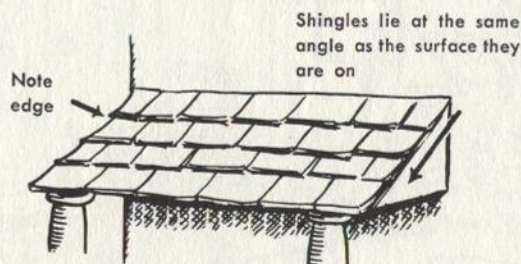
Don't forget that architecture is changing pretty fast these days. A fellow might be living today in a house that looks haunted. And next year his wife may talk him into building one of those modern houses with more glass in it than a row of department store showcases. Make your buildings fit the story and keep up with the times.



These are a few of the types of buildings that you, as a cartoonist, should be able to draw

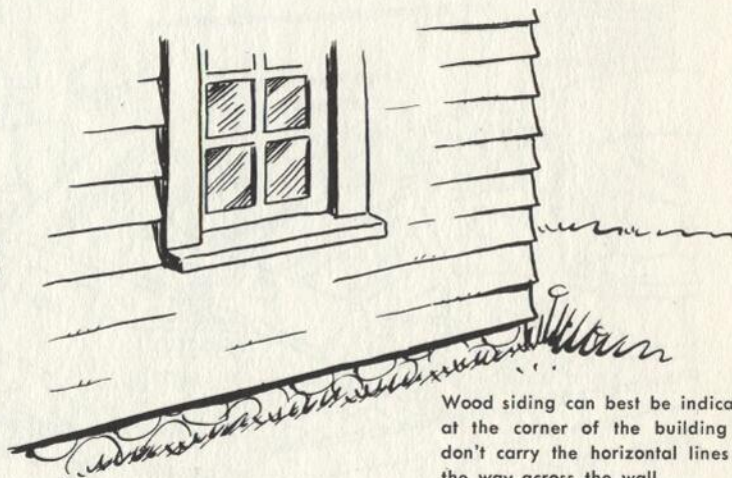


When you draw a brick building, don't try to draw all of the bricks—a few spotted here and there will be enough—note mortar space between bricks

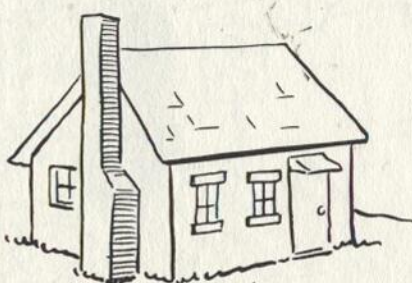
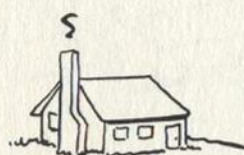


Shingles lie at the same angle as the surface they are on

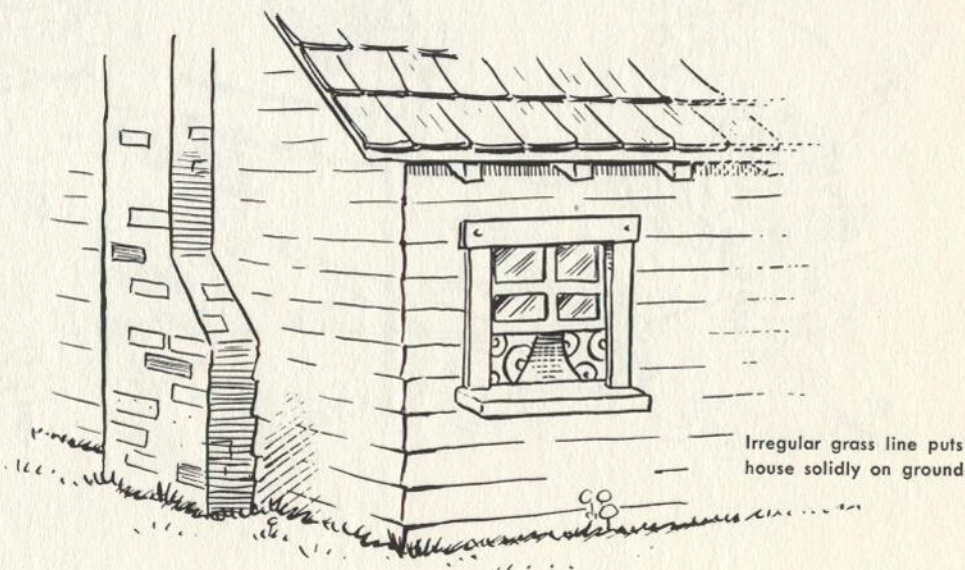
Shingles overlap each other — don't try to make them perfect



Wood siding can best be indicated at the corner of the building — don't carry the horizontal lines all the way across the wall



The closer you are to a building or other prop, the more details you see. Remember this when you draw. If you try to put the same details in a distant house as in a close-up, the small lines will fill up and make a mess in reproduction



Irregular grass line puts house solidly on ground

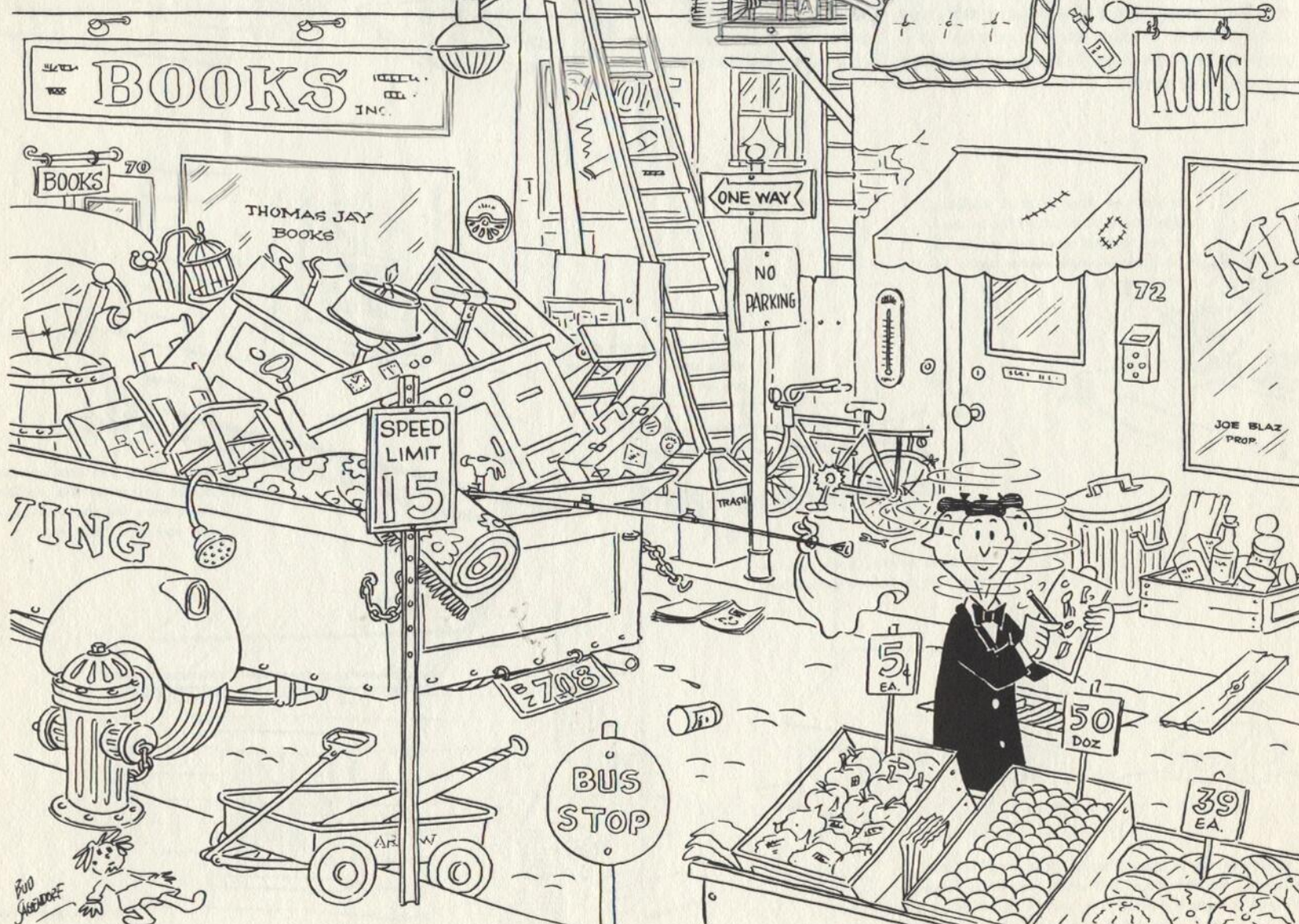


## Creating the background

Whether you draw a single panel or a strip, you must decide upon a background before which your characters will perform. This isn't quite as simple a matter as it first sounds. Too many of us get into the habit of always making the same two or three backgrounds work for any situation. Frequently the background is just as important as the figure in putting over the idea. A good idea can be ruined by not paying enough attention to the props and the background as a whole.

The important thing is to create a sense of realism with your backgrounds. If you have a plumber working on a sink, don't surround him with a bunch of carpenter's tools. Remember that lots of plumbers read the comics, and they will resent your not having at least one wrench for the character to work with. Learn to observe what the other fellow does and uses. When there is a fire, the firemen don't just stand there and admire the beautiful flames. Every fireman, especially in comics, loves to use his ax or squirt innocent bystanders. Look around you—see what props there are that you can use on some later day. Look at your neighbor's backyard—and take a squint at your own. All yards are different and they tell a lot about the character of their owners.

Keep working on that morgue. Build it up with pictures and drawings of everything you think you will need someday—and even with things you may think you will never use. The piece of scrap you thought you would never need is always the one you want two days after you have thrown it away.

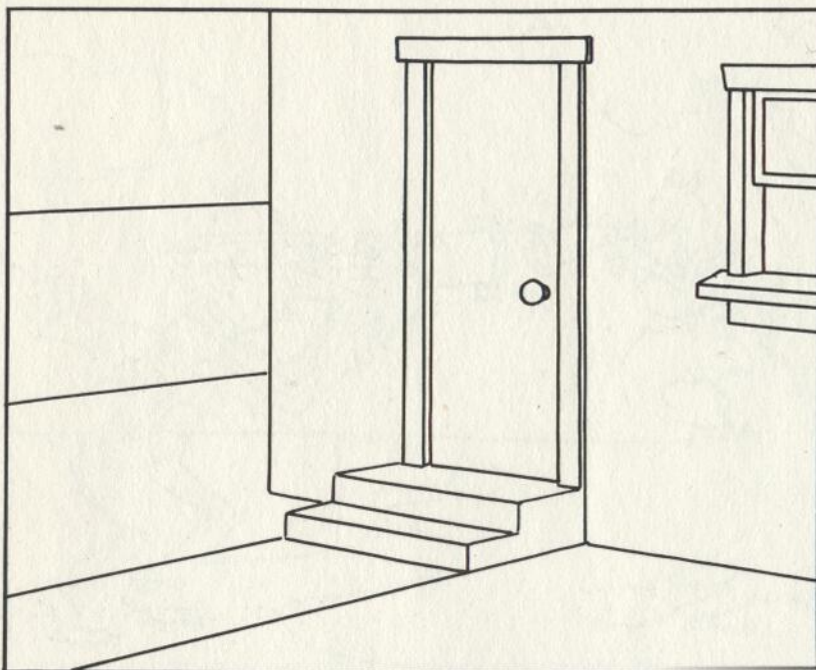


You are always surrounded by props and details—keep your sketch pad handy

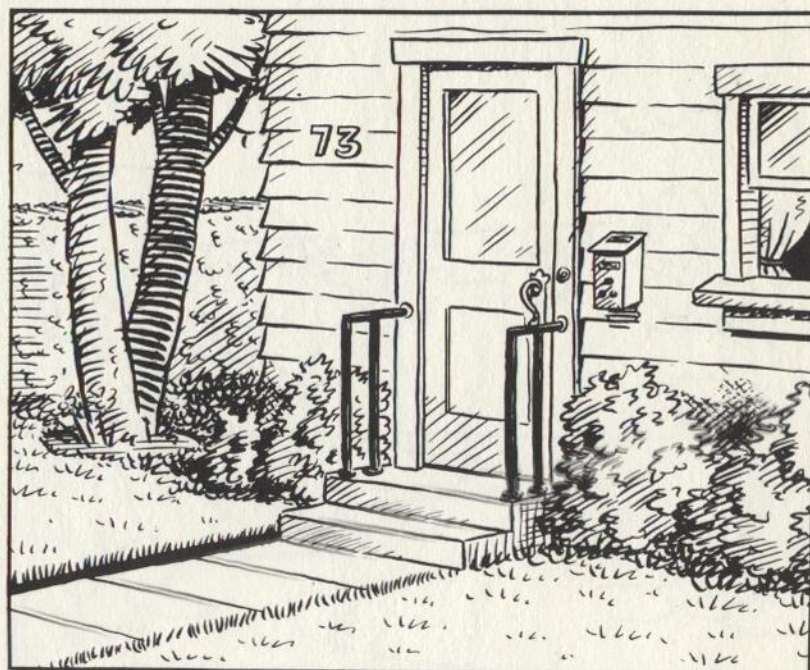


### Three scenes — one basic drawing

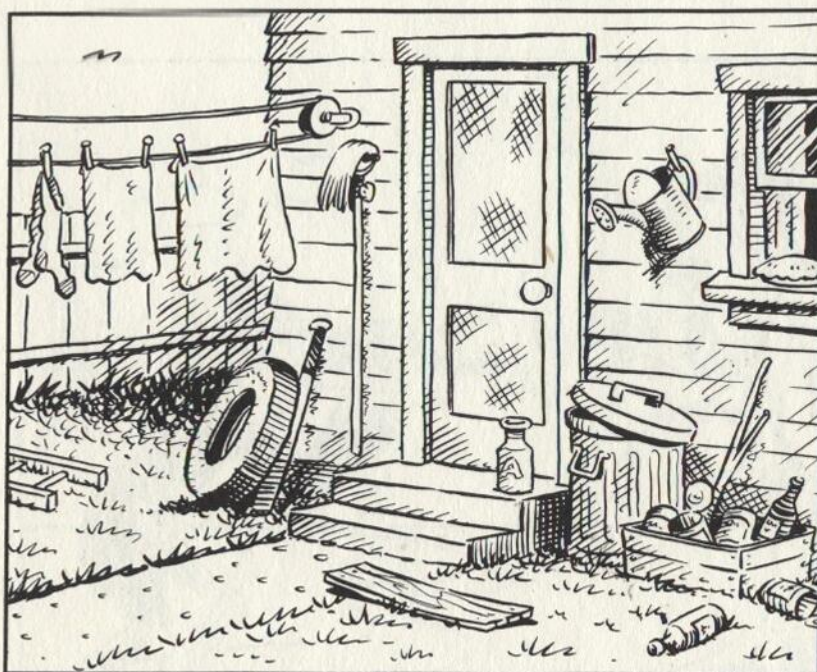
When creating the background for any given situation, remember that different props and details will often do the whole job of changing the scene. Below we have taken one basic drawing of a building with door and window and by changing the props and details, we have created three different scenes.



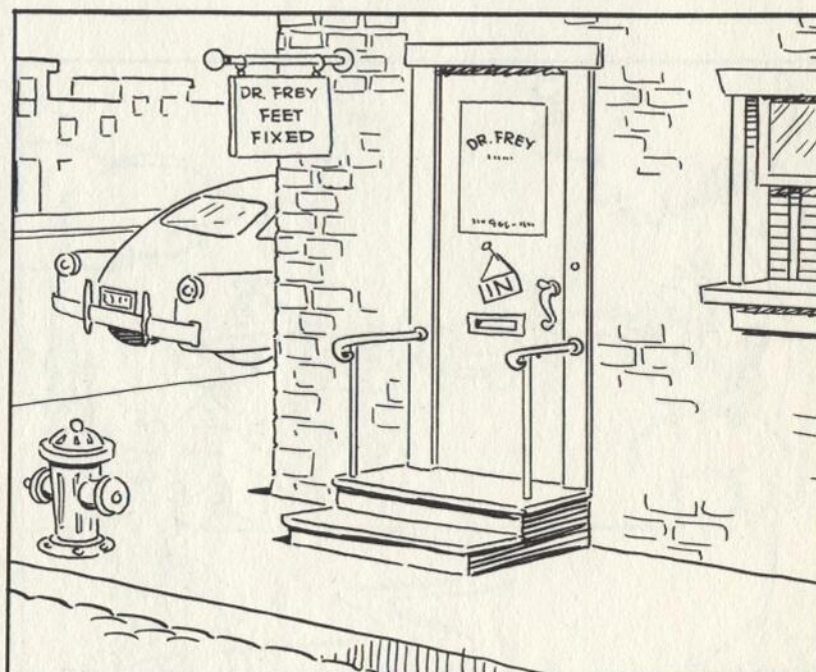
Here is the basic drawing of the side of a building showing the door and window



By the addition of props and details we have created a front yard



Here by the proper selection of props and details we change the basic drawing into a back yard



To move the building downtown we change its construction to brick and draw in the proper details

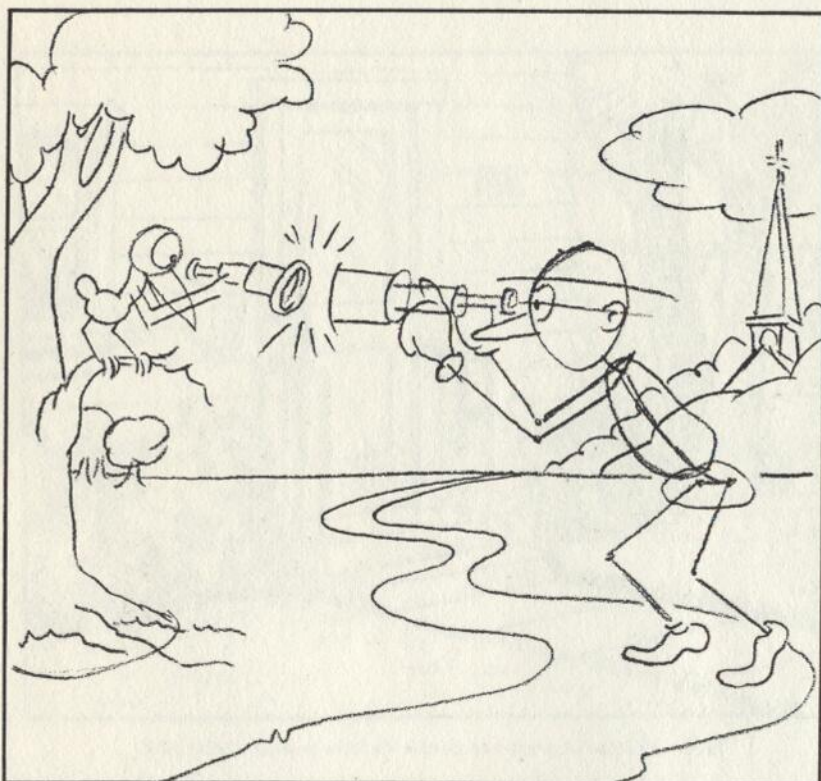


## Drawing the figure in the background

If you're like the rest of us, your mental image of a cartoon idea will include the characters *and* the background against which they will perform. Let's say your gem-like idea concerns a gentleman engaged in the grand old sport of bird-watching. You wouldn't draw him in a submarine. No — he belongs in the country. The props you have in mind are those of the open

country — a tree, a telescope, a path, maybe the suggestion of a village.

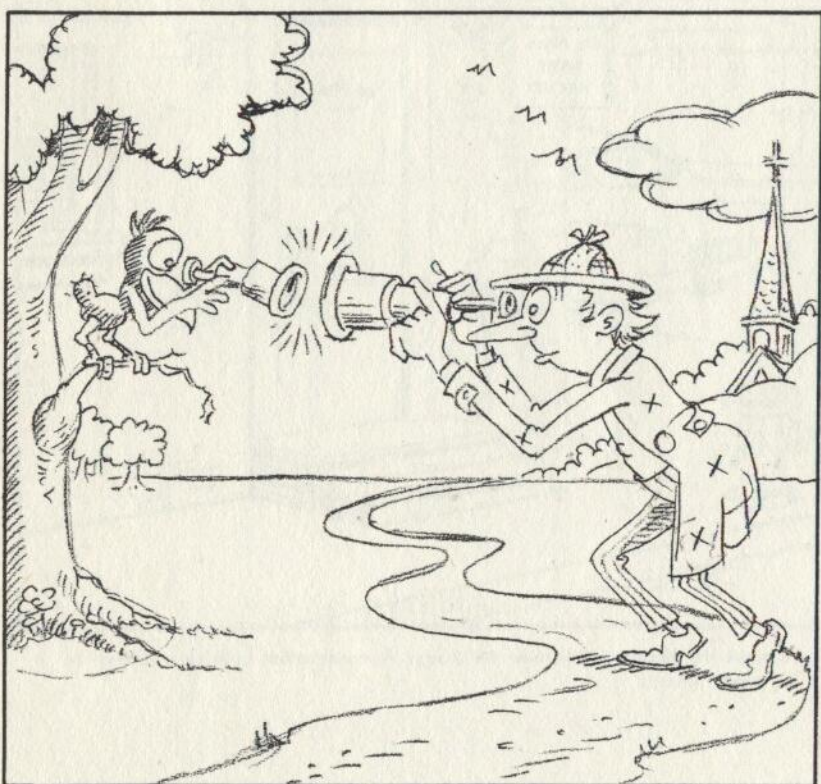
The scene has to *fit* the actors and *help* them get your idea across to your reader. Dreaming up backgrounds isn't too hard—learning to simplify them for use is. These step-by-step drawings show how to go about fitting the scene to the idea.



1. First decide what kind of background your story or idea calls for. Lightly rough out figure and background



2. If this looks right and fills the requirements of your story, finish up the pencil work on the figure



3. Now finish up the background in pencil — make any changes — indicate any shading that you will want



4. Ink figure and then background — let dry and then erase pencil — correct any mistakes or bad lines with Chinese white



## Comic strip backgrounds

Drawing backgrounds in comic strips brings up two problems which are peculiar to this medium. First, because of the space occupied by balloons, you must set the scene of your story simply — but firmly enough so that your reader has no doubts about its location. Second, this must be done in such a way as to avoid monotony as the reader's eye goes on from panel to panel. Think

of each panel as being a different shot: use distant shots, close-ups and angle shots to vary the pace of your strip. Take a look at any comic page in your newspaper and see how seldom a whole prop, complete with all its details, appears in a strip. Learn to put in just enough to set the stage for your story — and then stop.



Detailed background to set scene — note main characters in strong silhouette



Part of bulkhead and life preserver put characters aboard ship



Scene has already been set, no background needed. Emphasis is on characters



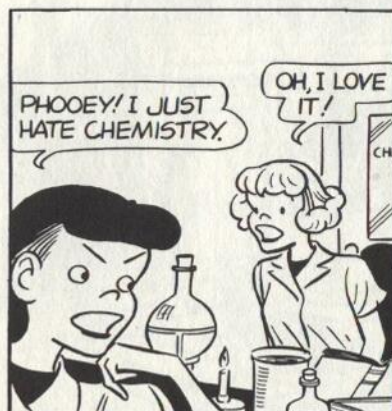
City scene is indicated by curbing and simple skyline buildings



No background — emphasis on action



Street scene re-set by auto and lamp post



Location set by simple chemistry props



Sign on door indicates it is a school chemistry class



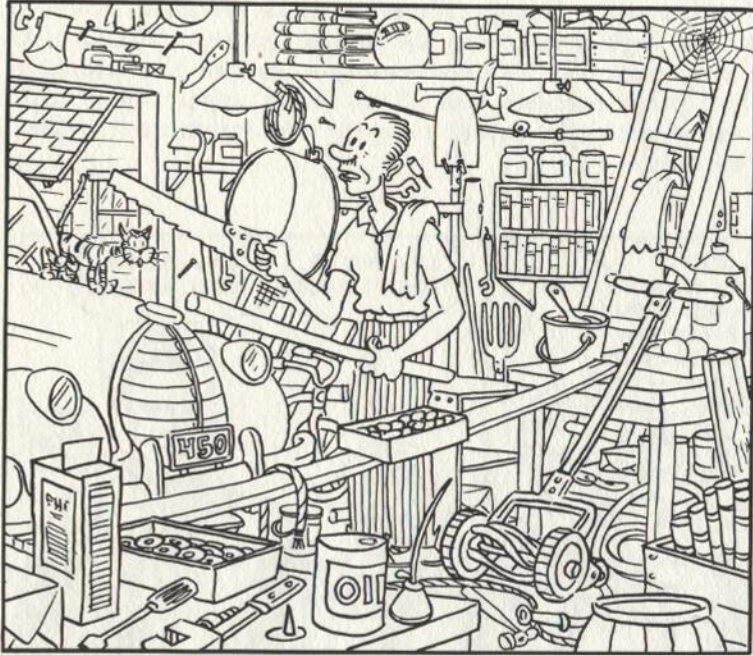
Emphasis on character — one test tube carries location along



Window and more chemistry props — all these scenes are simply and firmly established



### Things to remember



Don't overdo your backgrounds with too many props—use just enough to tell your story—no more



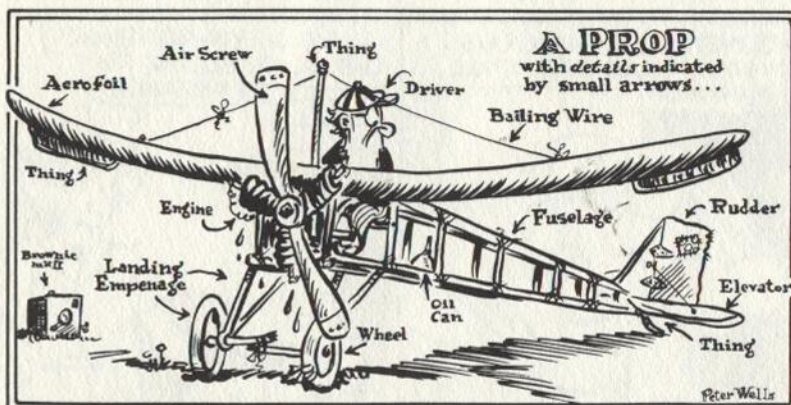
Another change of pace—good decorative props in the foreground with characters in silhouette



Simplicity makes your idea stronger. Here there is no question about the scene or what is happening



Change your reader's viewpoint—use angle shots to create variety and interest



Machinery plays an important part in this atomic age: learn to draw it simply and correctly



Keep details in key with your scene. For instance, a bait store is surrounded with boats, ropes and fishing gear



FAMOUS ARTISTS CARTOON COURSE  
Student Work  
Lesson 15

To study and practice

This is a lesson on how to draw things. There are enough examples of useful scenes to act as a stimulating swipe file for you, but don't think we meant to save you the trouble of building your own morgue. Nothing could do that. For specialized subjects, keep clipping pictures, studying them and filing them in your morgue for future reference. Don't get into the rut of using the same background over and over again for your characters.

As you develop the scene your idea calls for, always think of simplification. Look closely at the work of any good professional, and you will see that he seldom draws a complete prop when just a part of it will provide the setting. If the scene can be set by drawing only the side, windshield and steering wheel of an auto, he will not draw the whole, space-hogging car.

Our criticism on these assignments will be concerned mainly with the way you handle your props, details and backgrounds. At this stage of your Course, however, we may comment on your use of any or all of the teaching in previous lessons.

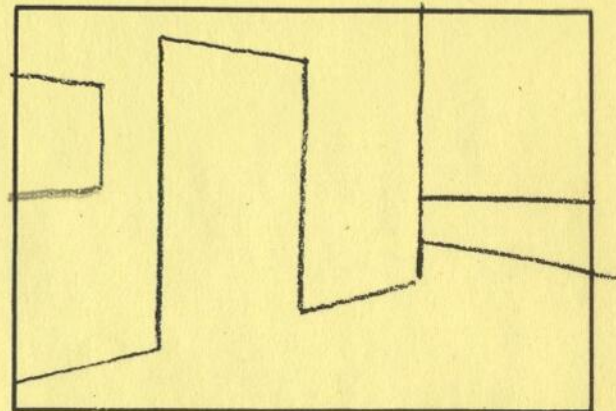
The assignments you are to mail to the School for criticism

ASSIGNMENT 1

On a sheet of 11 x 14-inch Bristol board, construct two panels. They will be reproduced 5 inches wide by 3½ inches high. Scale your panels up, for your working drawing, to 7 inches wide. Center them neatly on your paper, one over the other, with about one inch of space between them. Using the layout sketch on the right for your basic drawing in both panels (see page 15), draw the following scenes with pen or brush and ink:

- A. A door-to-door salesman giving his sales talk to a housewife at the door of a suburban house.
- B. A bum asking a handout from a business executive as he comes out of a downtown building.

IMPORTANT - Mark this sheet ASSIGNMENT 1.

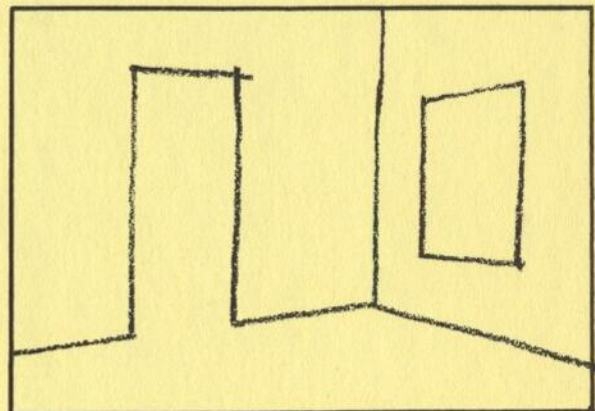


ASSIGNMENT 2

On another sheet of 11 x 14-inch Bristol board, construct two panels the same size as in Assignment 1. Using the layout sketch at the right for your basic drawing in both panels, draw with pen and ink the following scenes:

- A. A tenement-building interior, with a seedy-looking workman at a table, being served dinner by his wife.
- B. Using the same basic drawing, change the scene to show a society matron serving tea to an undernourished, poetic-type fellow.

IMPORTANT - Mark this sheet ASSIGNMENT 2.



Present your assignments in the same clean, professional manner you would use if you were submitting them to the cartoon buyer of a publication. Letter your name, address and student number carefully in the lower left-hand corner of each page. In the lower right corner, place the Lesson Number and Assignment Number. Mail to:

FAMOUS ARTISTS CARTOON COURSE  
Westport, Connecticut



**Famous Artists Cartoon Course**

**Westport, Connecticut**

**Animals**

Lesson

**16**

Rube Goldberg

Milton Caniff

Al Capp

Harry Haenigsen

Willard Mullin

Gurney Williams

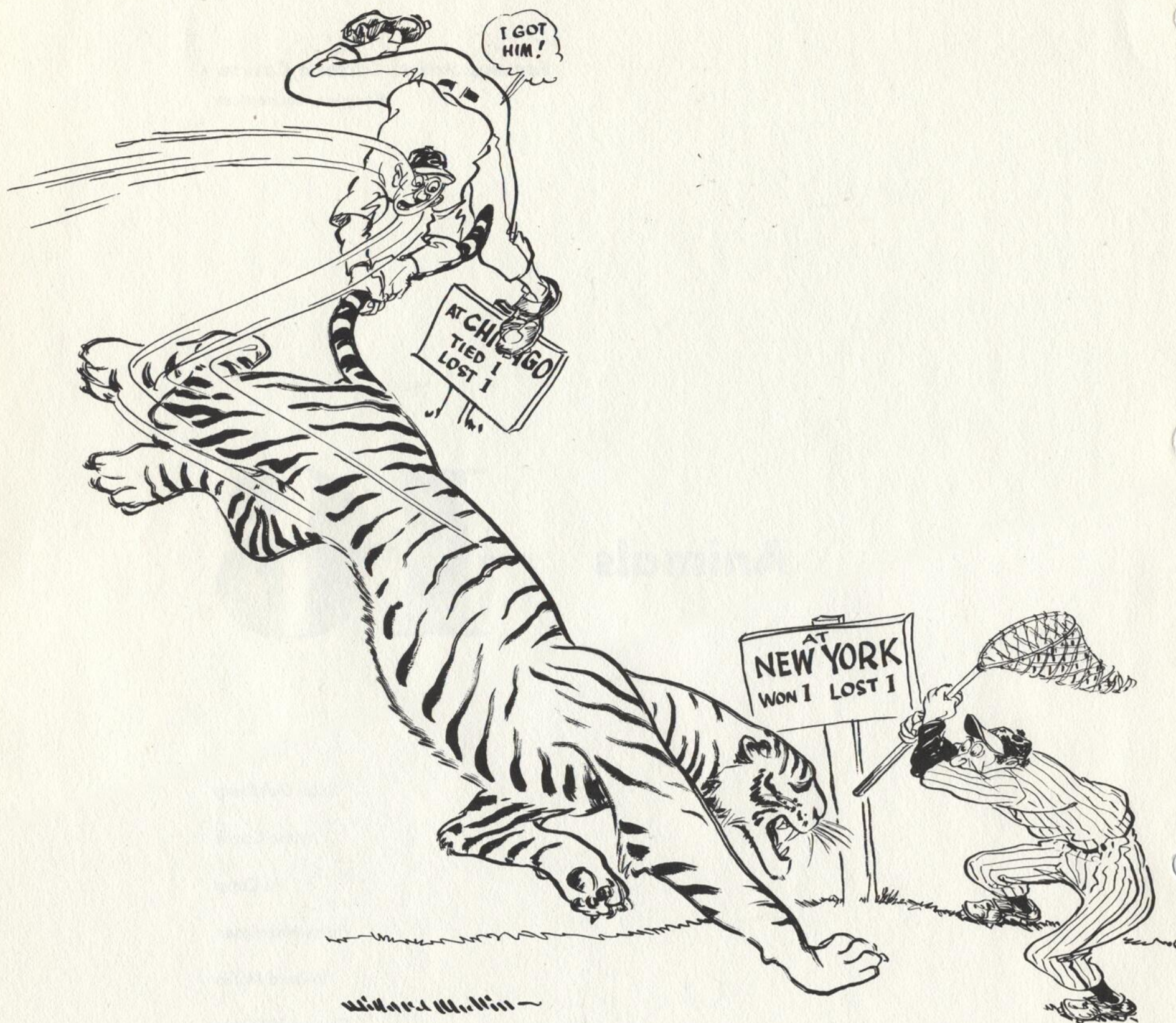
Dick Cavalli

Whitney Darrow, Jr.

Virgil Partch

Barney Tobey





Ever since people came down out of the trees the human race has associated with animals. Our language, thoughts and proverbs are colored with references to animals. They are a graphic part of our heritage — extremely useful to cartoonists in putting ideas across to our readers



## Animals

You studied the human "animal" when you studied anatomy and the figure in action. In this lesson, we will show you comparisons between the bone structure of animals and man. For comparison with man we will use a horse, a cat and a dog. In our diagrams we will make them about the same size to show the comparison quickly. We use these animals because they are representative of many similar, related species. For example, with slight proportional variations and differences in size, a cat is similar to a tiger, lion, puma, leopard, cheetah, jaguar, bobcat or lynx. Fortunately, these three animals serve a double purpose, because in addition to being similar to other animals, a cartoonist draws horses, cats and dogs more often than all the other animals combined.

Harold Von Schmidt, America's foremost animal artist, tells us that he *himself* often assumes the pose of the animal he wants to draw — his knowledge of comparative anatomy then enables him to transfer the human action to the animal. Of course, very few of us will acquire the ability to do this, but a cartoonist can save himself a lot of work later by soaking up a little knowledge *now*.

Animals come in such a wide variety of shapes and sizes that we can't show you how to draw them all. If you plan to specialize later in drawing animals, there are many good books that cover the subject. For a starter, one of the best we've seen is Ken Hultgren's *The Art of Animal Drawing*, published by McGraw-Hill.

Good pictures of animals in action are scarce, even in this age of photography. When it comes to drawing animals, your morgue is important; clip and save every beast you see in print. If you're lucky enough to live near a zoo, quick sketches are solid gold for later use. Also, there are plenty of strips and features running that started first with sketching pets around the house.

With knowledge of fundamental bone structure and good



morgue material a cartoonist should be able to draw any animal in the ark. You know that the bone structure is pretty much the same in all our four-footed friends — only the proportions change. Rough out your animals first, then dig into your morgue for details of the head, feet, tail, etc.

The style of drawing used in animated movies follows the human form more closely than the animal. These celluloid animals usually wear clothes and walk on their hind feet. Even the heads have been changed to give them a super-cute, human look. This is a fairly simple style and fun to do, but in a regular comic strip or gag with standard-type humans, animated-style animals are apt to be out of key.

Why draw animals in cartoons? Political and sports cartoonists *must* train themselves well in drawing fairly realistic animals. The political cartoonist uses them to represent nations or characteristic types of politicians. Most colleges and athletic teams have animal mascots, and a sports cartoonist must be able to draw them in action. As a gag or strip cartoonist, you can take more liberties with animals, depending on your style. They add character and authenticity when spotted around your work.

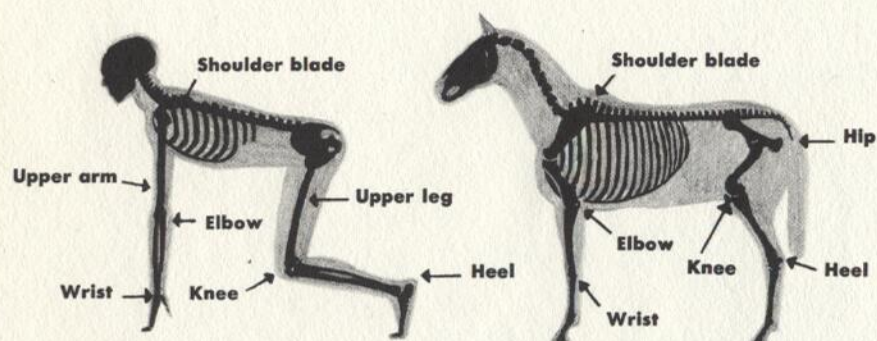
They are a great help to us in portraying human nature. The expressions *strong as an ox*, *sly as a fox*, *gentle as a lamb*, etc., are graphic; they create a picture in the mind. If we can transfer this mental picture to our cartoon, we are using symbols already familiar and understandable to our readers.

In the following pages you will benefit from your faculty's long experience with drawing animals. Willard Mullin uses more animals than the others and has a lot to say on the subject. Milton Caniff gives us some realistic animals. Rube Goldberg has the darndest collection of . . . well, take a look.

Remember: people *like* animals, even wild ones. That is why our zoos are always crowded on Sundays. If you can make a child feel that he would like to cuddle your cartoon bear, you have won that child as an admirer of your work.



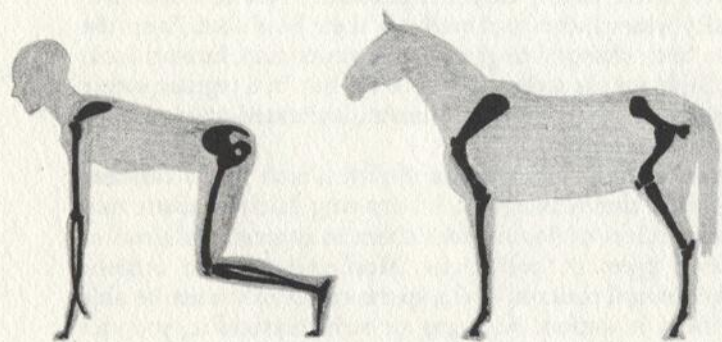
## A comparison of man, horse, cat and dog



The greatest difference between man and four-legged animals is the size and position of the shoulder blade. An animal's shoulder blade is on the side of the chest in order to support its weight. Man's shoulder blade is on his back



All four-legged animals have short, thick upper "arms" (from the elbow to the shoulder) and short, thick upper legs (from the knee to the hips)



Here, in black only, we show the legs. Study them carefully to understand where they differ and where the proportions change



You will notice that the dog and the horse are very similar while the cat's legs are shorter and in different proportions to its body

### Bone structure

The greatest difference between the skeletal structure of men and animals is in the legs. Next in importance is the position and size of the shoulder blade. Then comes the difference in the "upper arm" which, in the animal, is short and heavy and sits well into the body to help support it. The "forearm" in an animal, which is often mistaken for its upper front leg, is very similar to the human forearm. An animal stands on his toes and his "fingers." Study the diagram here to see where the wrist, elbow, knee and heel are changed relative to their placement in the human form.

Necks and heads vary in animals according to their individual requirements. The head and jaw are short and powerful in meat-eating animals while grass-eating animals have long heads and necks plus a different type of teeth which extend well back into the head along the jaw. Think of any grazing animal and you will realize that each of them has basically the same general head shape; think of cats, lions, dogs, wolves, etc. and their similarity is apparent too.

The structure of an animal's ribs and torso differs from man's in that it is deep, narrow and long, widening at the "lower ribs." Man's, in comparison, are wide, flat and short. The rib basket narrows toward the front, allowing for free side motion of the "front legs." It stops at the center or slightly back of the center of the body where the stomach lies. The rib basket stops here to allow the rear part of the backbone to bend easily, to help propel the rear legs in fast action and to aid in turning. It also allows the rear legs to have forward motion without striking any bone structure. The rear legs are joined to the backbone by a bone extension which is the pelvis that "sets out" from the backbone to allow the legs ample clearance of the stomach. The tail is simply an extension of the backbone.

### Leg bones

Special attention should be given to the bones of the legs. Structurally they are all alike but they vary greatly in different species of animals. The legs are diagramed here in a side view. The leg bone diagonals counterbalance and cushion the weight of the body. Even though bones are very hard and strong, their joints are arranged to "give and take" depending on the strain applied. This "give and take" ability is also directly related to the animal's locomotion.

The characteristic of the front leg at the top is the shoulder blade which is flat but has the outlined shape of a cone with the tip slanting forward and down. Here it meets the "upper arm" which is short and thick and slants down and back at about the same angle as the shoulder blade. From here the direction of the bone structure proceeds vertically down past the "wrist" and the "thumb" to the first three joints of the "fingers" which is the foot of the animal.

The upper rear leg connects at the pelvis in a ball and socket joint. It is short and heavy like the "upper arm" and varies according to the species. It slants forward and down at about the same angle that the "upper arm" slants back and down. From the end of the upper leg, the lower leg, often mistaken for the upper leg, takes a direction back and down at a right angle to meet the "heel" or hock. From the end of the heel it proceeds nearly vertically, favoring a forward slant, to the toes or rear foot.



### The muscles

The frame of a building is covered with wood, plaster and so forth. The frame of an animal is encased in muscles. The shapes of these muscles determine the character of the total form as we finally see it. Animals with short hair, such as a horse, a short-haired dog (Boxer) or a cow, let you see part of the muscle function under their tightly stretched skins. This is quite noticeable in a moving horse. In other animals such as a cat, bear or long-haired dog, this is not so.

Good drawing of an animal in its characteristic form is dependent on knowledge of the muscle structure. The forward part of the chest, shoulders, legs and neck contain the large important muscles. The contour and thickness of the front legs, shoulders and rear legs and hips should have your attention since they contain the most active muscles. The chest muscles sit well forward where they join the shoulder muscles and stretch back, under and between the front legs.

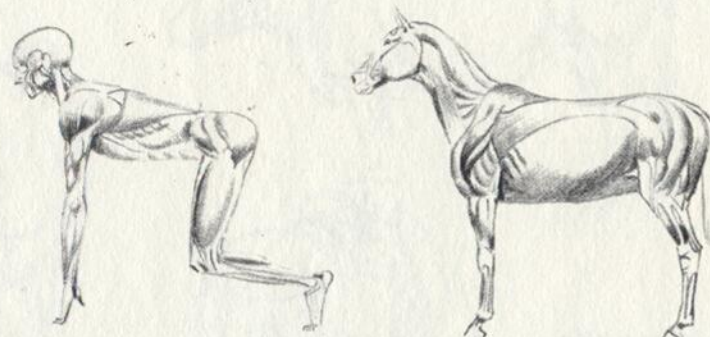
Study the direction and shape of the muscles in the marginal picture. Also study those of the horse and dog carefully. You can learn more that way than by simply reading about it. Although the muscles are in the same place on each animal, notice that they vary in form among the different animals. For example, the long muscle of the cat family sweeps back from the lower part of the shoulder blade to meet the back and top muscle of the rear leg. This long sweeping muscle gives definite character to the final drawing of the cat. The long, top neck muscle plus the leg and shoulder muscles of the horse are important to the character of the horse. Study the muscle construction so you can transpose them into different views of the animal you may need to draw. Study where they begin and end and their general shape. This will allow you to place them correctly when you change the position of the animal.

### Final form

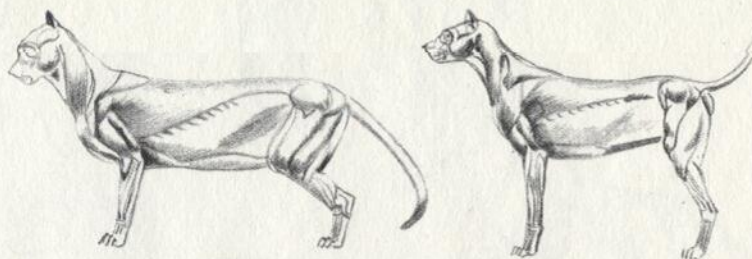
After the skin has been stretched over the frame and muscles, we see the final form. You may ask at this point, "How is the animal shaded?" Do you recall the shading of a sphere and cylinder? An animal, like a human, is composed of spheres and cylinders with individual variations. Most farm and wild animals live out of doors, so the light source is generally from above. Whatever the light source, the feeling of *solidity* must be achieved.

As you work on your drawings, you will find it will pay you to rough in the basic forms and the animal's action before trying to draw the over-all figure as it finally appears. Getting these forms figured out beforehand will help you make a final drawing that is solidly three-dimensional and convincing. The final outline is just the frosting on the cake — it comes *after* the forms are thought out.

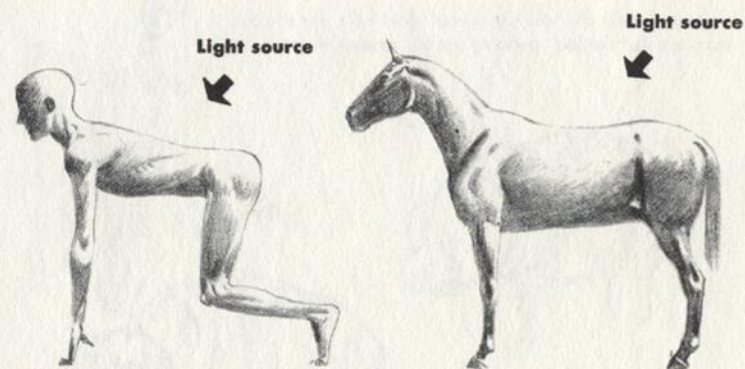
The *basic* structure of a handsome movie hero is the same, for example, as a pot-bellied politician with whiskers down to here. The *details* identify the types to your readers. Just in this way, the *details* make the difference between horses, ponies and mules; cats, lions and panthers and dogs, foxes and wolves. Figure out the action and the general structure of the breed of animal you are drawing — then go ahead and finish up the beast with details from your memory and morgue. Remember: if your other characters are drawn in a simplified comic style, don't go overboard by putting realistic, lifelike animals alongside them — they'll look out of place.



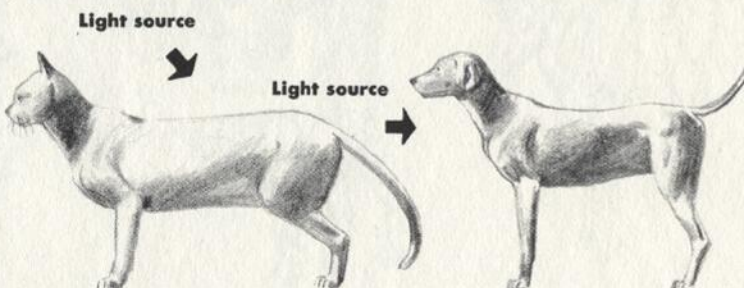
The powerful muscles occur in the shoulders and legs of animals



The muscles are developed to the particular needs of each animal and are correspondingly proportioned. The careful study of muscles as they relate to different species of animals is important to you in making a drawing that finally gives the character and form of the animal



A covering of skin tissue and hair makes a familiar visual form. The source of light intensifies the roundness of the form



With knowledge of structure and muscle a good solid drawing develops





You fit a rider on a horse. Notice the leg on the far side following the contour of the horse's body



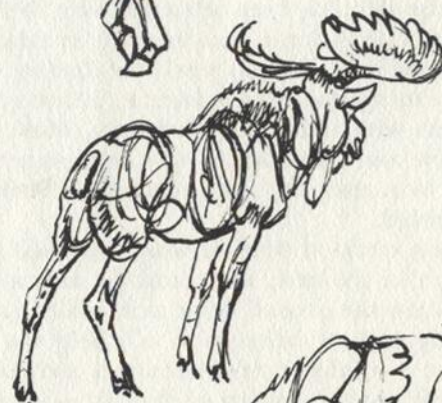
You put a saddle on a horse. It must follow the contour of the horse's back



When making a finished drawing from a sketch, study the bone and muscle charts and build the bones and muscles into the form in the position you wish to draw it



From any point of view an animal must be a constructed form, not an "outline" drawing but an animal that is built



After study and observation — you learn how to draw by drawing





Study the construction of animals. Make sketches of details and character and notes on proportion. Then draw them solidly as we have shown you here. Do not draw the outline.

**DRAW THE SOLID FORM OF AN ANIMAL**

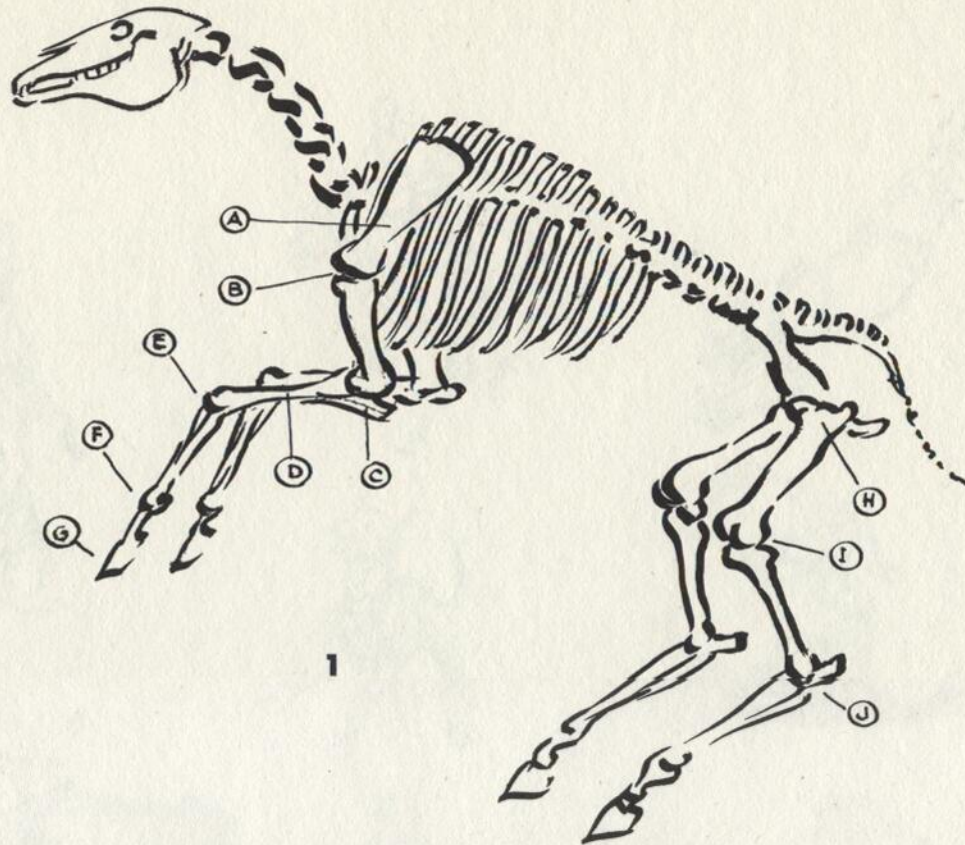
### Knowledge works for you

What we have said in this lesson exhausts what can be said in words. Knowledge of form, anatomy, motion and your own observation of attitudes, character and rhythm should give you a good start for animal drawing. No one can make the drawing for you. We can only point out to you fundamentals of construction and the method of procedure. You must make the drawing!

On these two pages we show you a variety of animals in many positions and actions for your observation and study. These drawings were made with the kind of knowledge we have just taught you—plus observation. You can do as well by studying and analyzing and by **OBSERVING AND REMEMBERING**. Make hundreds of drawings like these. If you do not seem to “get it,” go back in this lesson to the part that applies to your problem and study it carefully.







### Animals by

Noah's Ark plays a tremendous part in the life of a sports cartoonist, but the beasts don't always come in two by two. Sometimes they run in herds. There is the Princeton Tiger, the Detroit Tiger, the Missouri Tiger and the one from L. S. U. (Swamp Tiger, I believe). California's Golden Bear, U. C. L. A.'s Bruin, the Chicago Cub, Baylor's Bear, the Big Bad Chicago Pro Bear and the Brown Bear among others. The Fordham, Los Angeles and Rhode Island State Rams. And Mustangs, Longhorns, Wolverines, Gophers, Beavers, Wolf Packs, Lions, Bull Dogs, Horned Toads, Owls, Eagles, Hawks, 'Gators, Panthers and Goats all over the place. Besides the traditional animals as symbols, you will be able to turn others to your own use. For example: Some fighter you may be drawing is a notorious clutch and clinch guy. Well, just what does an octopus look like anyway? That's where your "morgue" or clips come in.

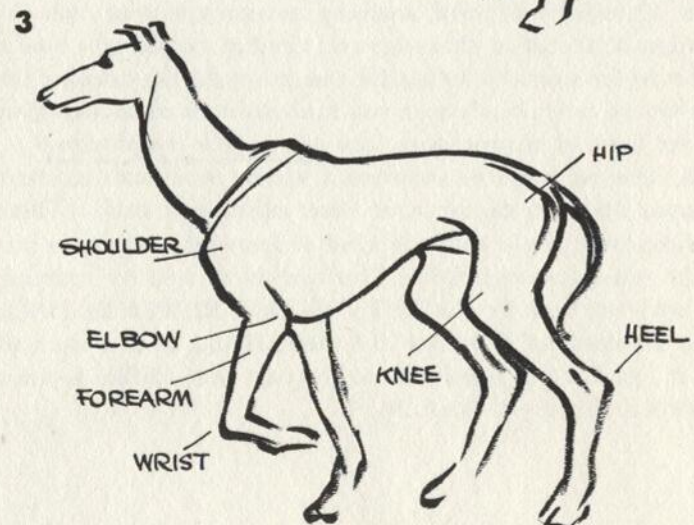
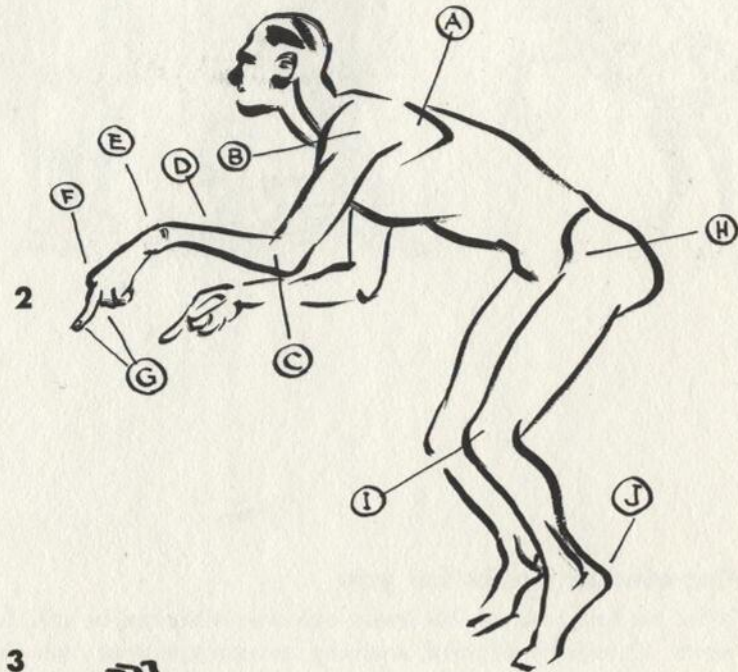
In drawing animals it might be well to compare, in a skeleton of an animal, the joints as they correspond to similar points in the anatomy of man.

In Illus. 1. (Skeleton of a horse) and Illus. 2. (a man, we trust) (A) is the shoulder blade, (B) the shoulder, (C) the elbow and (D) the forearm. What most people think of as the "knee" in the foreleg is in reality the wrist (E). (F) is the knuckle, and (G) the hoof is actually the "fingernail" of one toe — the rest having been lost in the eons of evolution since eohippus (the prehistoric horse) bounced around this young earth on three toes.

To go on to the hind leg, (H) is the hip, (I) is the knee and (J) is the heel.

You will notice in each instance that the joint of the animal, (shoulder, wrist, elbow, etc.) seems to be one point higher than in man. That is, the elbow and knee are right next to the body; the heel and wrist far above the "foot." But the corresponding bones are there. The animal's legs are hinged well up, and the upper arm and leg are not as free as in man.

The same general scheme applies to all animals. (Illus. 3.)

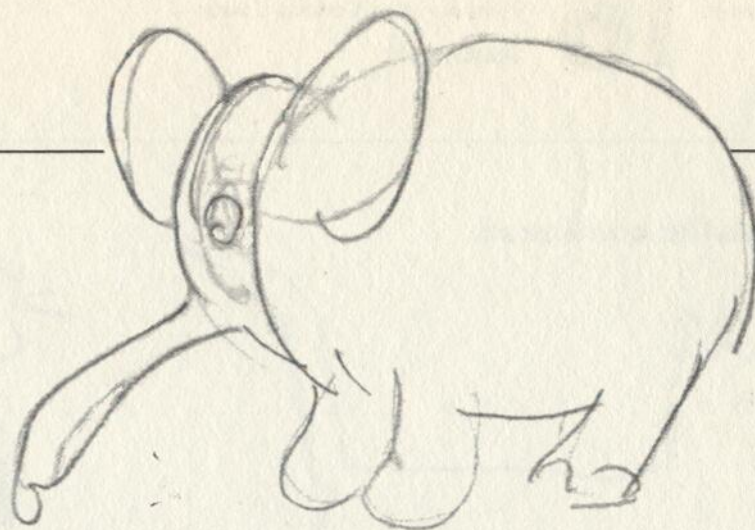




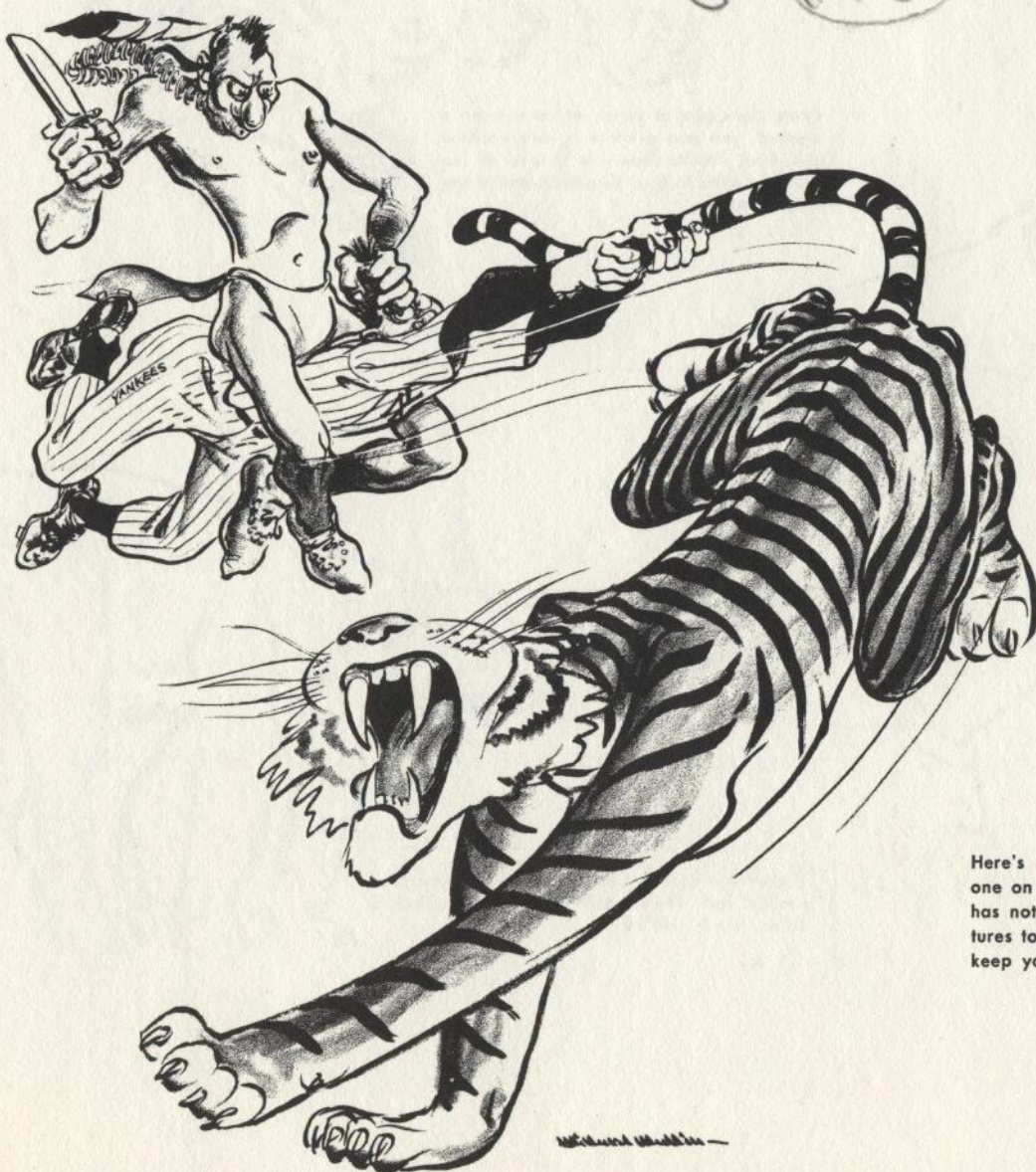
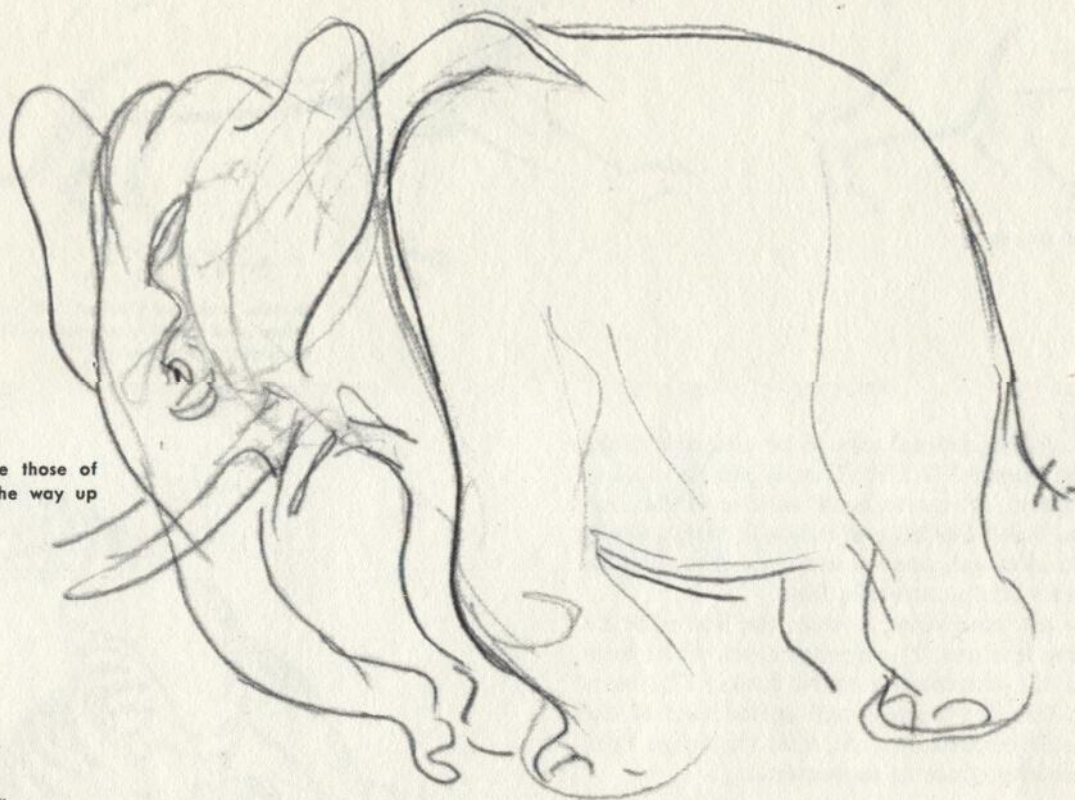
It is well to learn the construction of your animals. Once you have that you can use them in *any position*. The construction *does not change with action*.

One example is the elephant. He is *not* merely a great round hunk of flesh with kegs for legs.

In reality he is a long-legged animal; those arm bones above the forearm run clear to the shoulder.



The elephant's legs, like those of other animals, run all the way up to the rafter of his back



Here's another tiger. Compare him in this pose to the one on the opening page of this lesson. The construction has not changed — just the position of the various features to give us a different view of him in action. Try to keep your cats sweeping and graceful in action



### Mullin continued



Draw any old alley cat

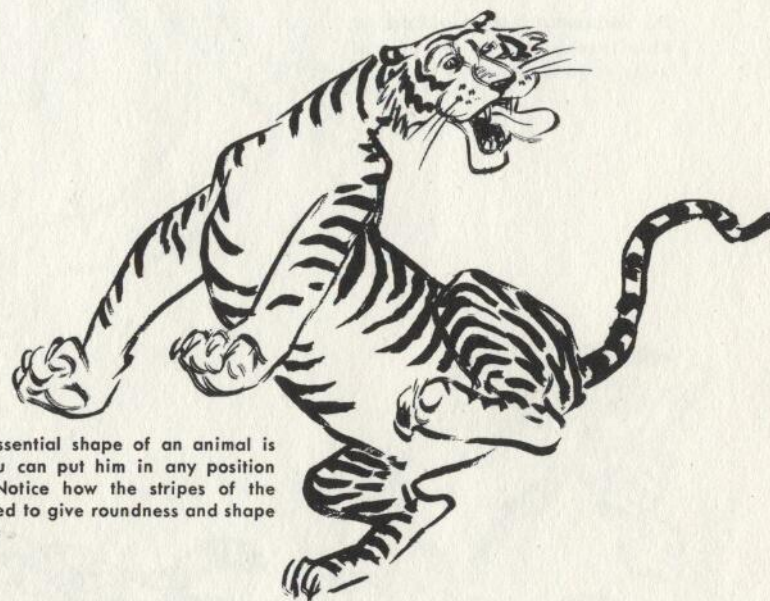


Besides mane and tufted tail one other small detail is needed — the undershot lower jaw

### The cat family

The salient feature of each animal should be observed. Take the lion — Ah, Ha! The Mane! *NO SIR!* That is just the parsley around the fish. The mane, of course, is distinctive of the lion but that ain't the Lion, Bub! The king of beasts is, first, a *CAT!* You draw any good old alley cat, put the mane on him, tuft his tail and you have a pretty fair picture of a lion.

Each member of the cat family has, as does the lion with his mane, its own distinctive features. The tiger's stripes, white bush around the chops and the extremely narrow flanks. The leopard's spots. The long, straight forelegs and tufted ears of the lynx, etc. But each is still essentially a cat, with the feline face, retractable claws and flowing graceful movements.



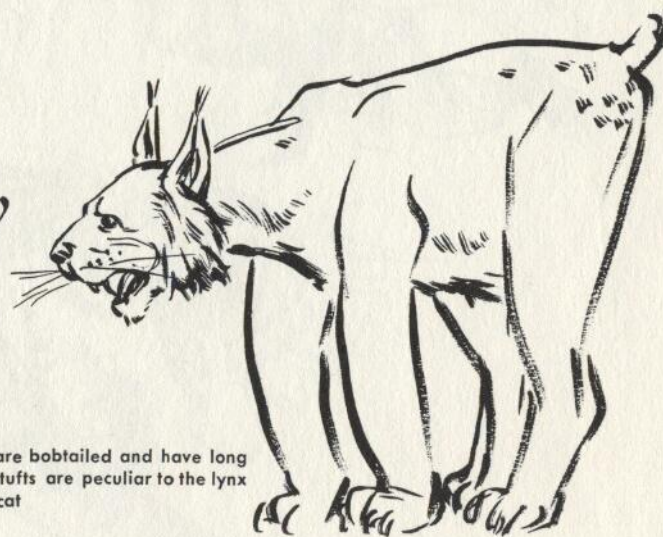
Once the essential shape of an animal is learned, you can put him in any position you wish. Notice how the stripes of the tiger are used to give roundness and shape to the form



The puma or mountain lion is characterized by its long neck, small head and heavy tail



The wildcat and lynx are bobtailed and have long straight legs. The ear tufts are peculiar to the lynx alone, but it is still a cat

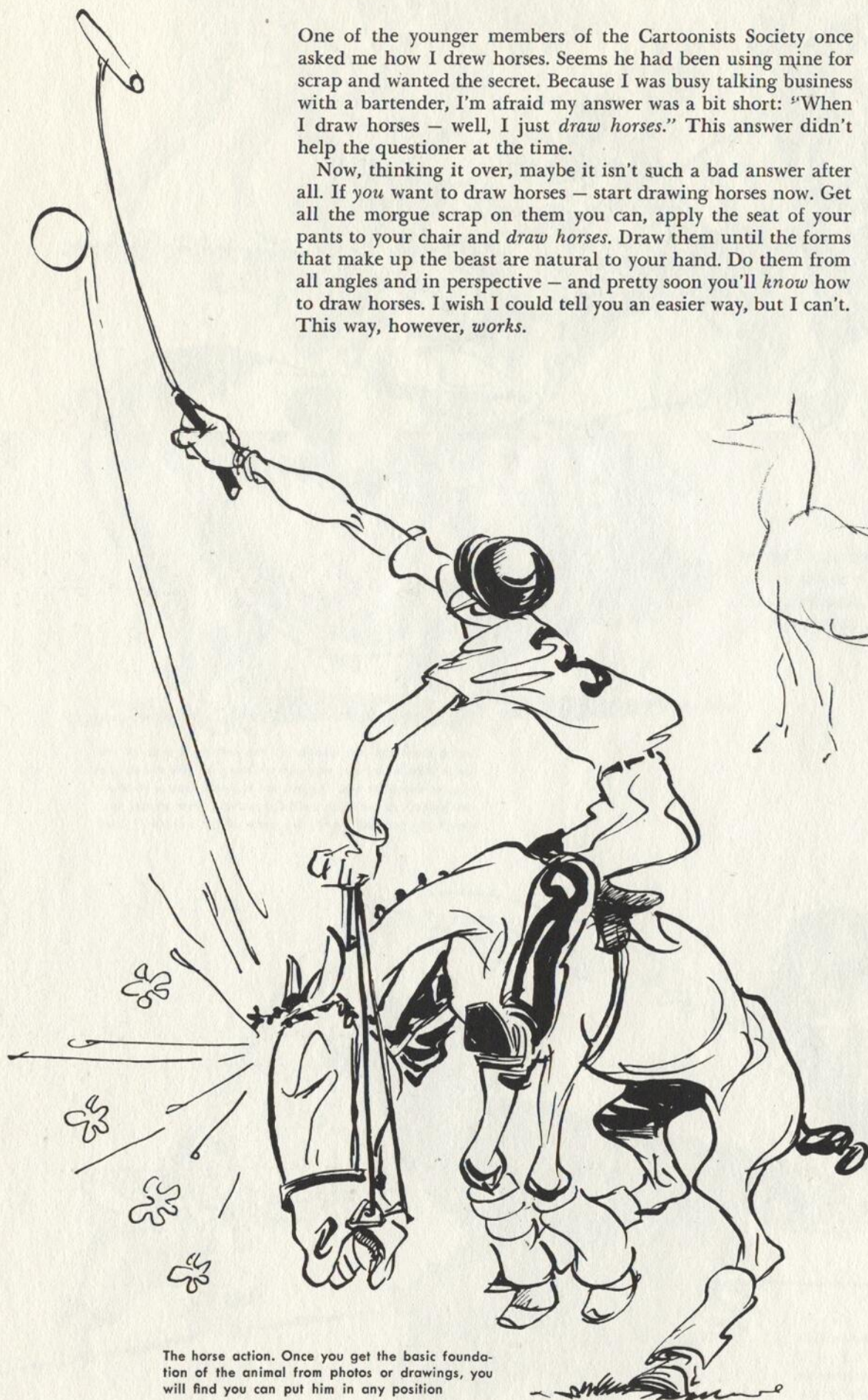




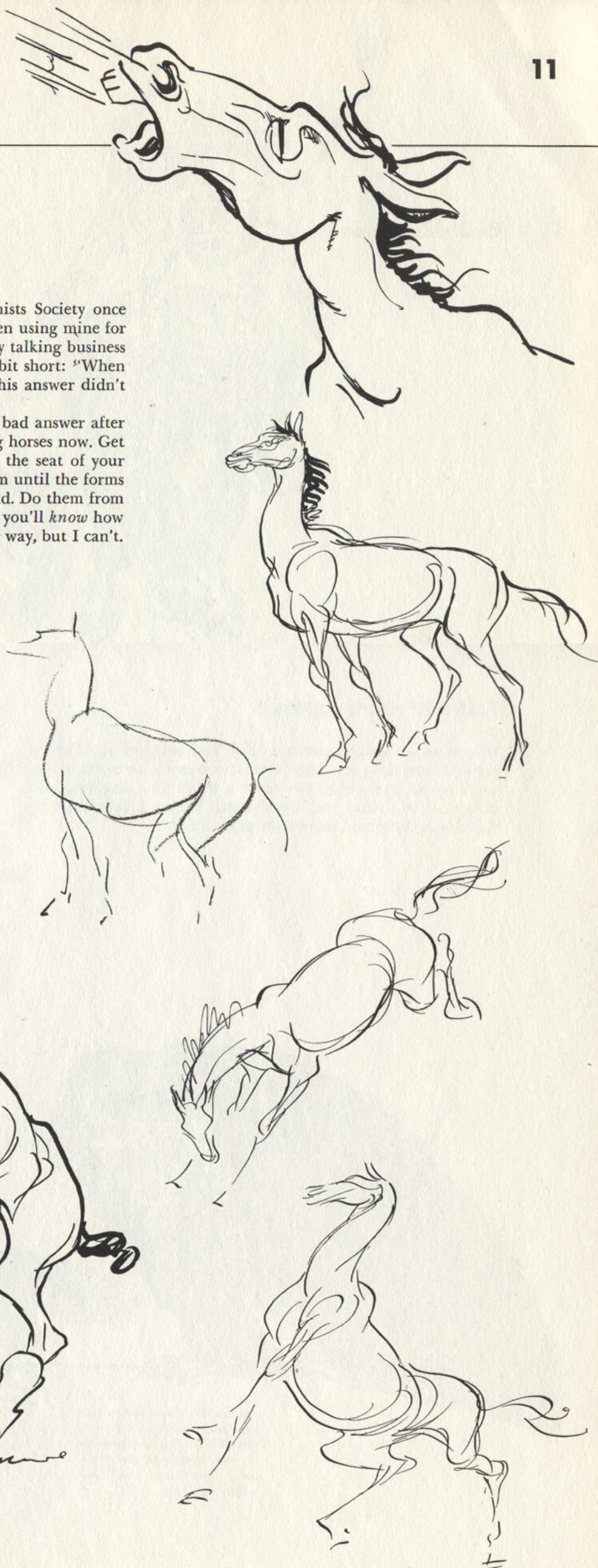
### Horses

One of the younger members of the Cartoonists Society once asked me how I drew horses. Seems he had been using mine for scrap and wanted the secret. Because I was busy talking business with a bartender, I'm afraid my answer was a bit short: "When I draw horses — well, I just *draw horses*." This answer didn't help the questioner at the time.

Now, thinking it over, maybe it isn't such a bad answer after all. If you want to draw horses — start drawing horses now. Get all the morgue scrap on them you can, apply the seat of your pants to your chair and *draw horses*. Draw them until the forms that make up the beast are natural to your hand. Do them from all angles and in perspective — and pretty soon you'll *know* how to draw horses. I wish I could tell you an easier way, but I can't. This way, however, *works*.

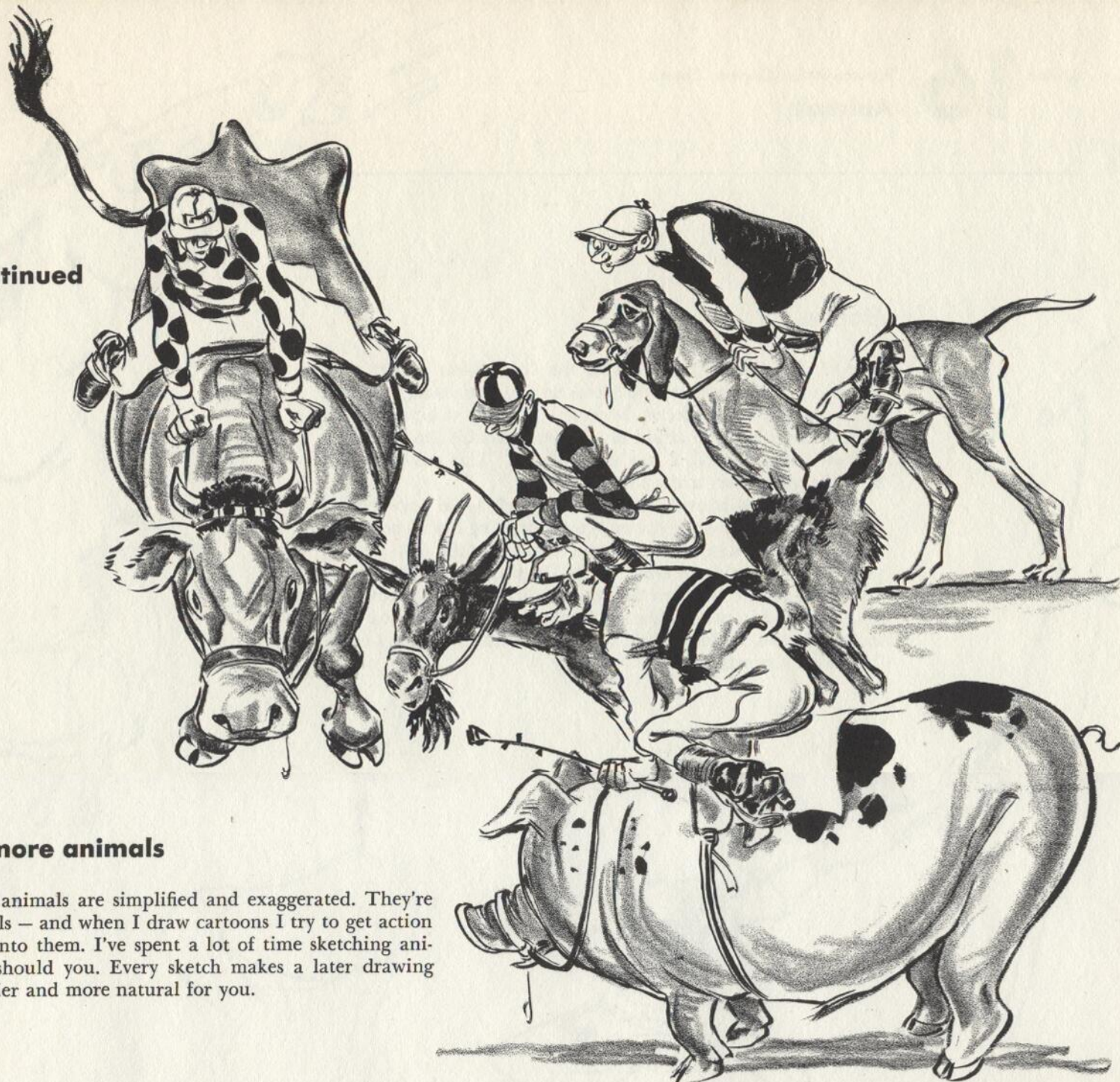


The horse action. Once you get the basic foundation of the animal from photos or drawings, you will find you can put him in any position





### Mullin continued



### And still more animals

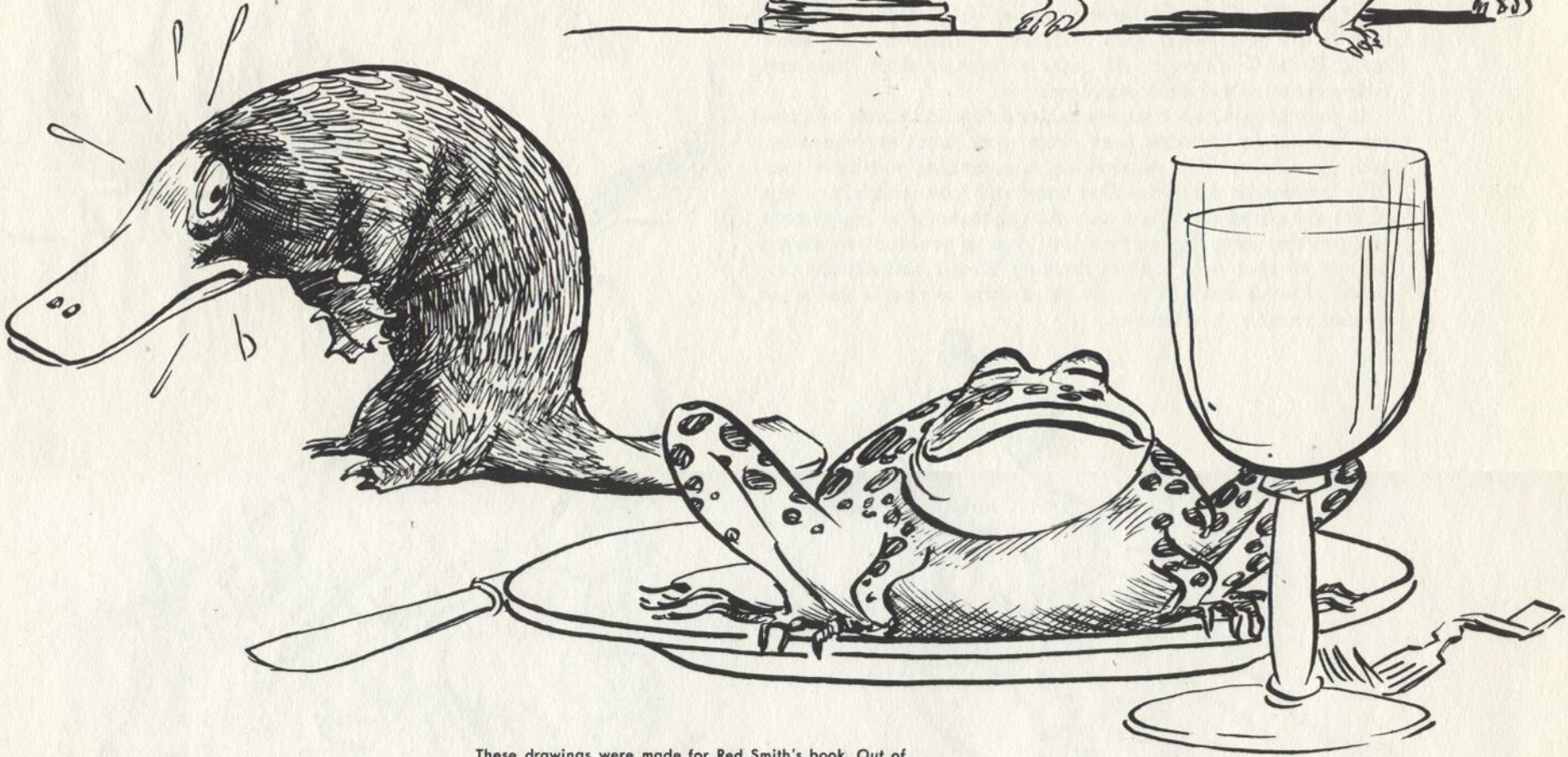
Of course my animals are simplified and exaggerated. They're *cartoon* animals — and when I draw cartoons I try to get action and emotion into them. I've spent a lot of time sketching animals, and so should you. Every sketch makes a later drawing that much easier and more natural for you.

Some time ago the quality of the entries in one of the large handicaps was way out of line with the money the winner stood to win. It gave me a good chance to show the jockeys mounted on unlikely animals. Here again, past sketching paid off. These are some of the animals I used

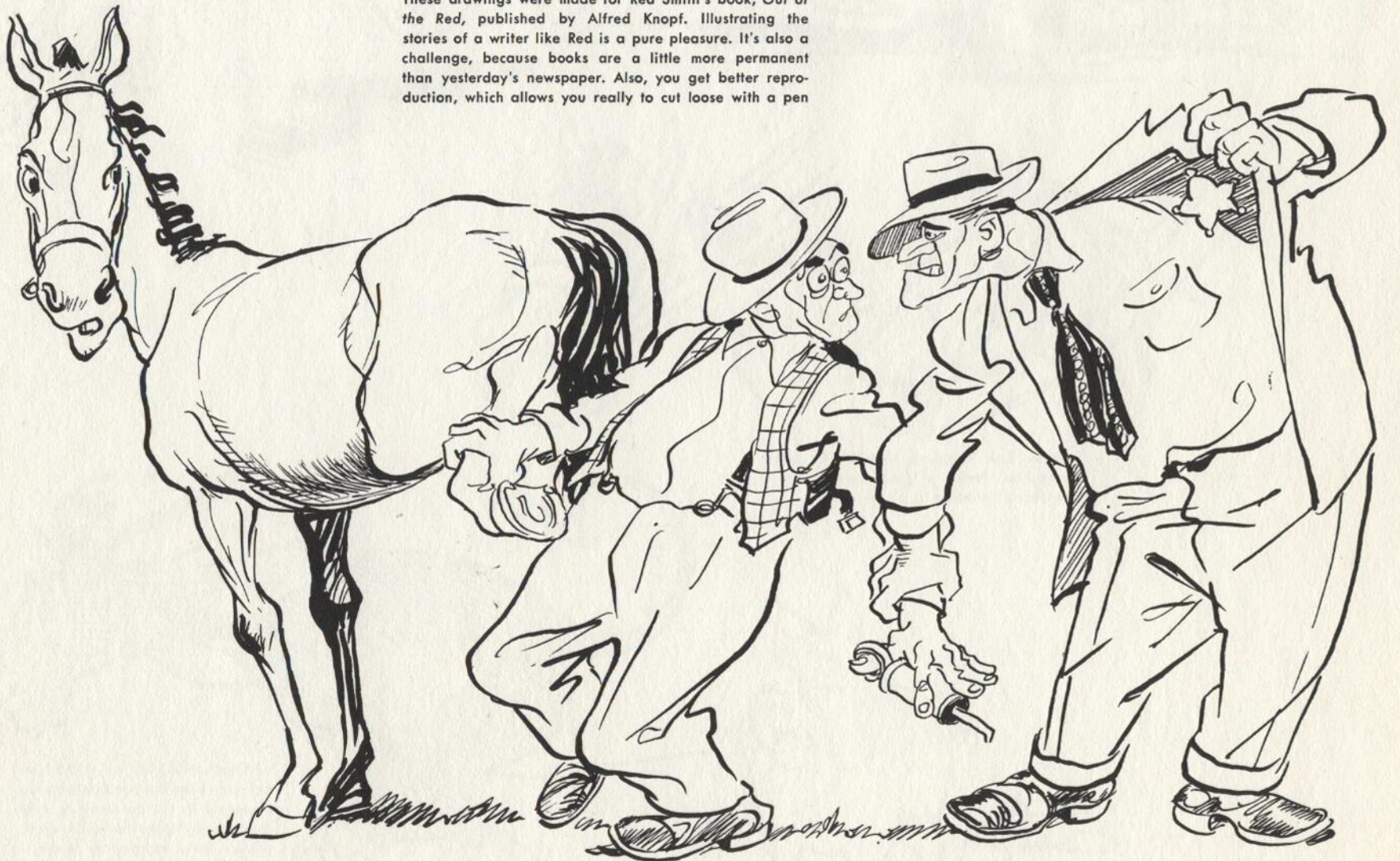


Animals don't have human feelings and reactions. But — it doesn't hurt the expressiveness of your cartoon beasts if you put a little human "feel" and motion into them





These drawings were made for Red Smith's book, *Out of the Red*, published by Alfred Knopf. Illustrating the stories of a writer like Red is a pure pleasure. It's also a challenge, because books are a little more permanent than yesterday's newspaper. Also, you get better reproduction, which allows you really to cut loose with a pen

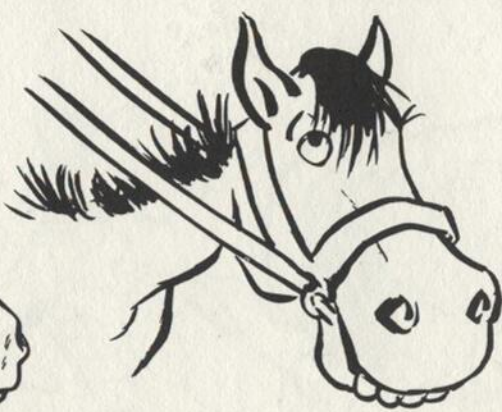
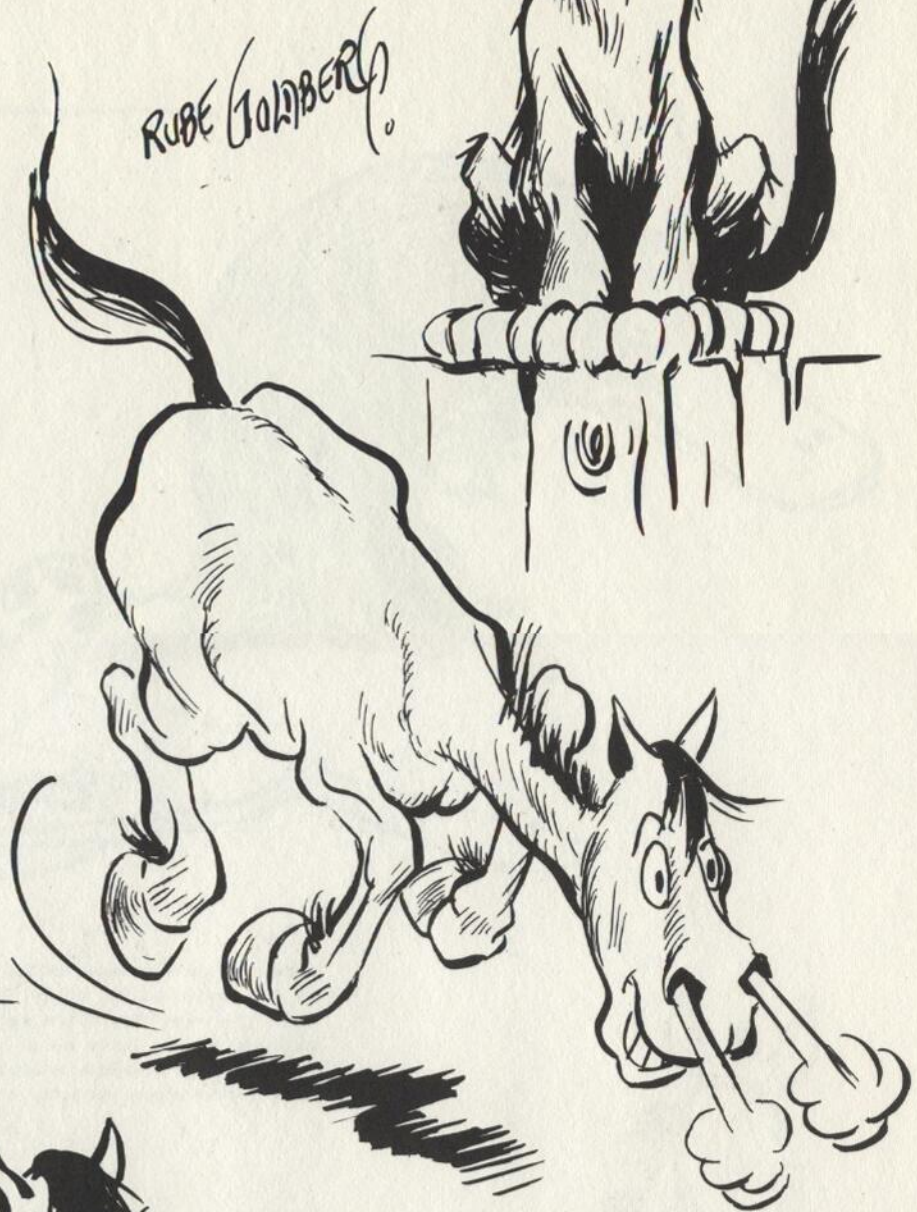
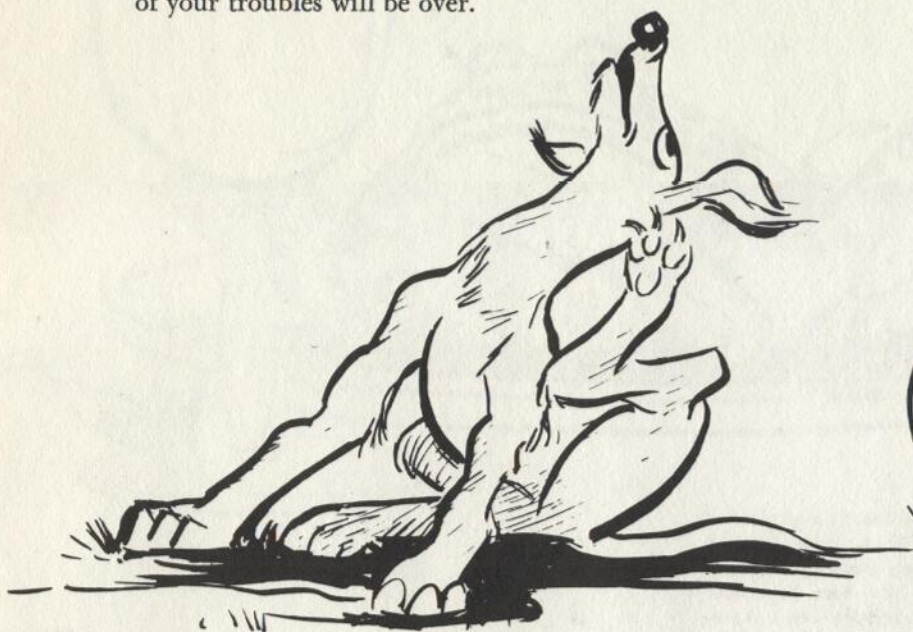




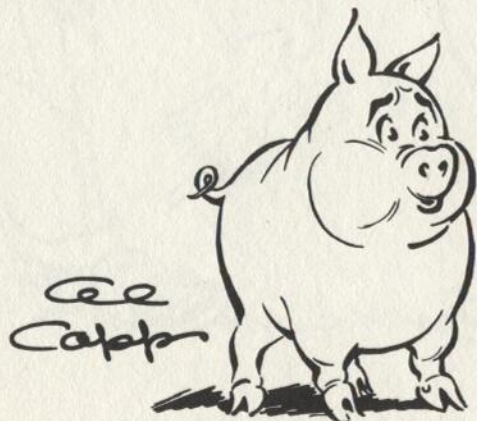
### Realistic vs. comic animals

It stands to reason that both your animal and human figures should be drawn in the same style. If Steve Canyon rides out of the Forbidden City on a camel, you can bet that the beast will look like a *real* camel with authentic rigging. On the other hand, Rube Goldberg or Al Capp could have their characters riding green pigs down Main Street.

If your idea calls for an animal, you should be able to draw that animal *in key* with your other work. Let's say your idea calls for a horse. If horse drawing is something you have carefully avoided in the past — that horse will look labored and out of key, no matter how good your morgue material is. Experiment and practice sketching animals until you've gotten them shaken down into your own style of drawing. *Comic* animals are supposed to be expressive. Just think of them as people and a lot of your troubles will be over.



When Rube Goldberg simplifies he really simplifies. Here's a good example of a cartoonist drawing in his own style



Al Capp's hillbillies live in the farm belt (Mountain Div.) and animals are necessary to tell the story of their lives. Never forget the usefulness of animals when you portray human — or inhuman — nature





Never copy animals cold—use  
photos and drawings for anatomy  
and flavor — then DRAW YOUR  
OWN

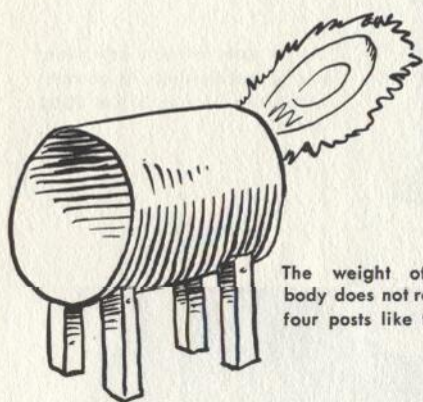
MILTON  
CANIFF



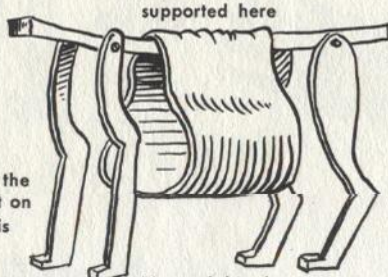
## A few important tips

For some strange reason, nine out of ten cartoonists are stopped dead in their tracks when it comes to drawing a dog's hind leg. It's a sort of an occupational mental block. This page may help you overcome this as well as a couple of other little queeries.

The business of an animal body's weight *hanging* from the backbone is also something to tuck into your skull. It is true of *every* animal except man, and is one reason we poor mortals have to worry about our weight or go literally to pot.

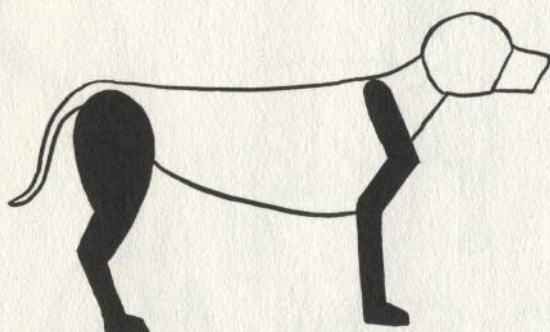


The weight of the body does not rest on four posts like this

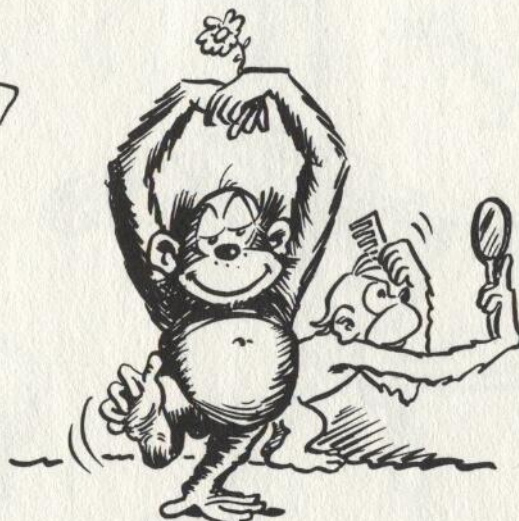


The weight is supported here

The weight of the body hangs



The basic shape of the side view of all animals' legs are shown blacked in. The changes are only in proportion



On a monkey's upper arm the hair grows downward, on his forearm upward. Look at your arms, buster

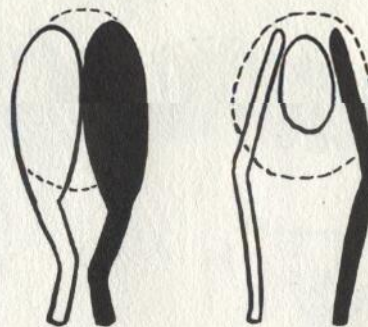
Right



Wrong

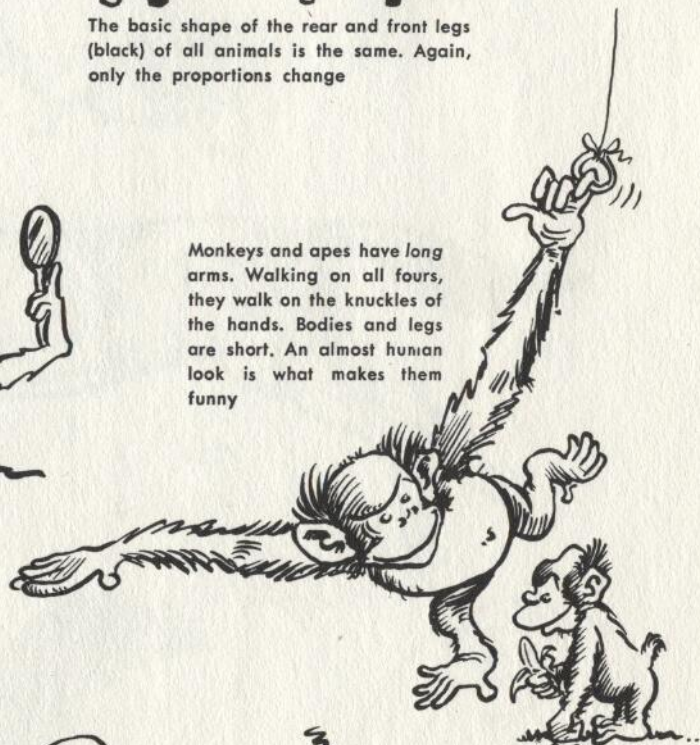


Think of the backbone as a rafter from which the sack of the body hangs—the supports or legs are attached to the rafter, not the sack

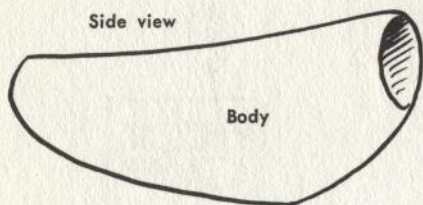


The basic shape of the rear and front legs (black) of all animals is the same. Again, only the proportions change

Monkeys and apes have long arms. Walking on all fours, they walk on the knuckles of the hands. Bodies and legs are short. An almost human look is what makes them funny



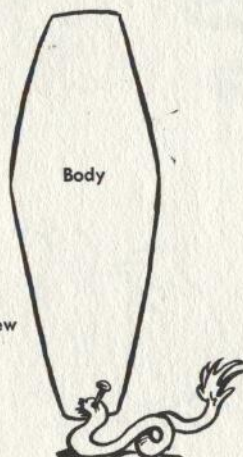
The animal body narrows at both ends to allow free leg motion forward and backward



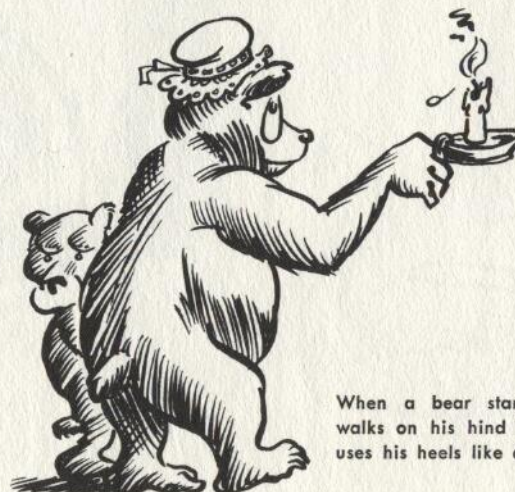
Side view

Body

Top view

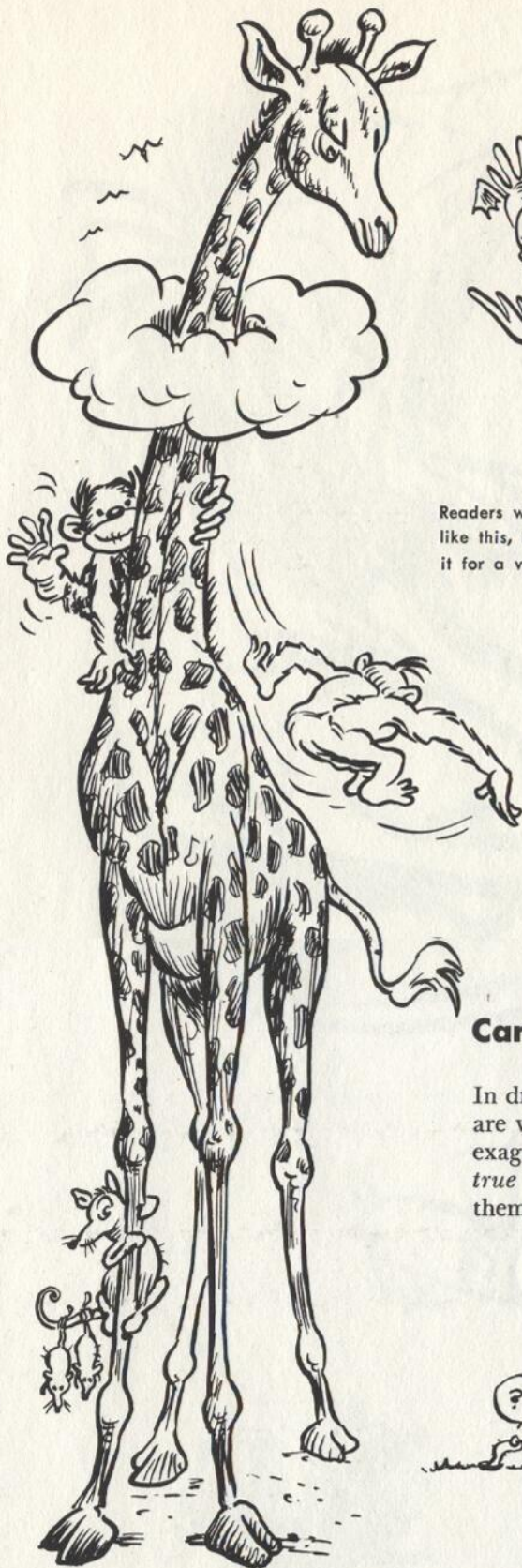


Body

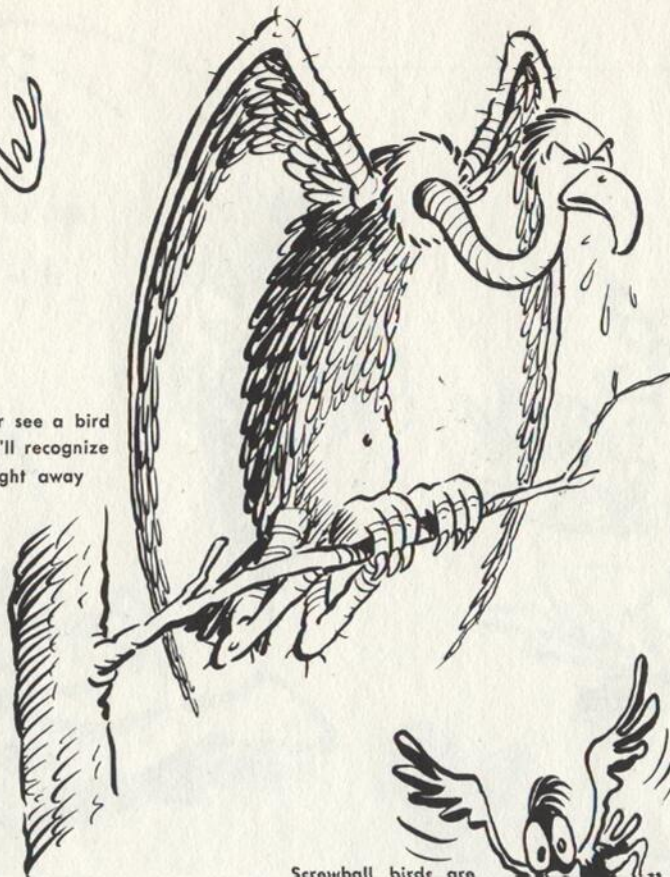


When a bear stands and walks on his hind legs, he uses his heels like a man





Readers will never see a bird like this, but they'll recognize it for a vulture right away



Screwball birds are nice grace-notes

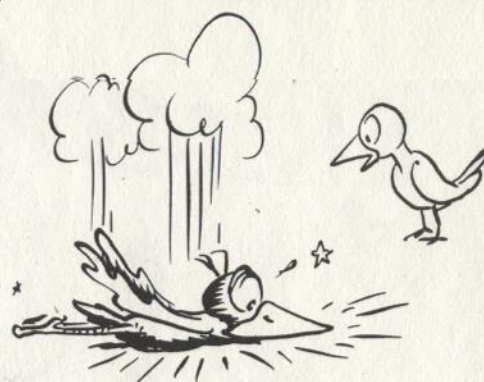


There are plenty of tips on human behavior to be found in the barnyard

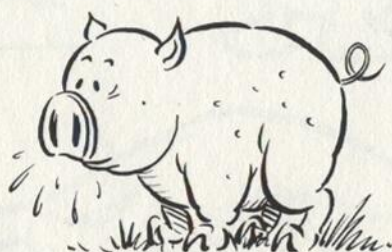


## Cartoon animals

In drawing true-comic animals, as with humorous humans, there are very few rules to follow. You pick the features you want to exaggerate and go to it. However, the more you know of their *true* forms, the funnier they're going to look when you draw them for laughs.



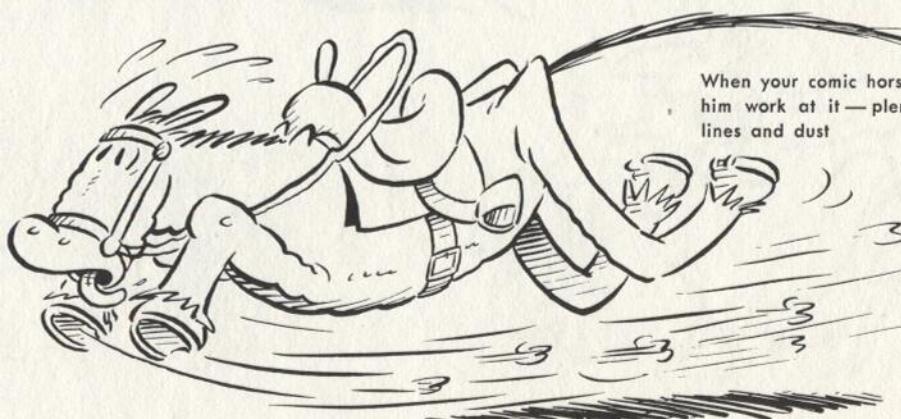
Fish are naturally graceful shapes, full of curves in action. Don't clutter them with too many small lines



These animals don't look much like their real-life models—but they're alive and full of action



Frogs are strangely human in their looks and lend themselves to fantasy



When your comic horse runs, make him work at it—plenty of speed lines and dust



## Animals have style, too

Drawing animals, like all cartooning, calls for practice. And, as you practice, you'll find yourself drawing them naturally in your own style. This is a good thing — editors are quick to spot where cartoonists have copied another fellow's animals cold. Keep at it until your animals are in key with the rest of your cartooning





FAMOUS ARTISTS CARTOON COURSE  
Student Work  
Lesson 16

To study and practice

In this lesson Harold Von Schmidt, one of the true masters of animal art, and the creators of your Course show you how to draw animals. What you get from all of them is a method of constructing the beasts. Learn your basic shapes and structure and build your critters not as flat, two-dimensional outline drawings, but as solidly constructed forms in many different positions and actions. Above all, practice until you know their form, and then go on to simplify them and put them into your own style.

Magazines are full of pictures of all kinds of animals. Clip them and save them in your morgue. Don't copy them -- just refer to them for shapes, proportions and details that will make your cartoon more convincing. See how much you can simplify the essential forms of the beasts and still keep their special character. Make a few lines do the work of many. A few well-chosen strokes will indicate the long hair of a shaggy dog better than a thousand careless ones. Try to give the animals different expressions -- they can show all the feelings that people do.

When we criticize your assignment drawing we will look, first, to see if you have given your animals solid form. Second, we shall want to see that you've given them expressive action. Don't draw your animals just standing around. Try to show their personalities and reactions to the situation as humorously or dramatically as possible. Exaggerate their emotions -- we want you to cut loose and have fun with this one.

The assignment you are to mail to the School for criticism

On a sheet of 11 x 14-inch Bristol board, rule and ink a panel 8 inches high and 10 inches wide. In it, using either pen or brush, create a cartoon involving one or more circus animals who have escaped and wandered into a barnyard. Indicate just enough background to set the scene, and be sure your animals dominate the composition. Draw in your own style and try to put the animals' actions and reactions across with a wallop.

Present your assignment in the same clean, professional manner you would use if you were submitting it to the cartoon buyer of a publication. Letter your name, address and student number carefully in the lower left-hand corner of the page. In the lower right corner, place the Lesson Number. Mail to:

FAMOUS ARTISTS CARTOON COURSE  
Westport, Connecticut



**Famous Artists Cartoon Course**

**Westport, Connecticut**

**Kids**

Lesson

**17**

Rube Goldberg

Milton Caniff

Al Capp

Harry Haenigsen

Willard Mullin

Gurney Williams

Dick Cavalli

Whitney Darrow, Jr.

Virgil Partch

Barney Tobey





### **We were all kids once**

At some time in their lives, each of your readers was a child. Memories of childhood are pleasant things to most of us. A universal experience, and a pleasant one at that, is a great asset when you are trying to please the public. Don't forget your childhood.





## Kids in comics

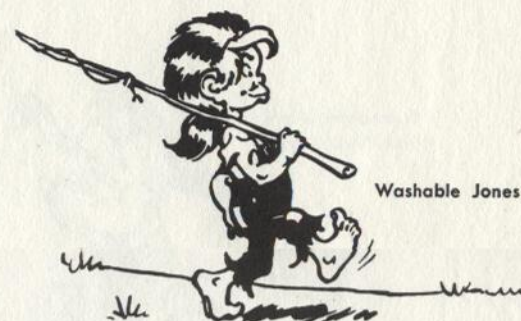
The very first strip of them all was a kid strip: "The Yellow Kid." And what a kid! He wandered around the slums, in and out of saloons and made fresh remarks about everything from politics to the size of Mrs. Murphy's fanny. Today things are slightly different.

In the first place, it seems that kids aren't kids any more. They're "juveniles," and have Authorities, mostly self-appointed. Parents, teachers and educators in general are more organized now and are given to letting off blasts at editors. Editors do not enjoy adverse criticism from large groups of potential customers. So — a large number of taboos have grown up about handling the actions of printed children and you are here advised to keep your kids fairly unobservant of the facts of life.

Funny thing is, most kinds *are* innocents. They live in a very different world from us adults, and even with taboos, there's plenty of humor left to go around. A child's comments on the adult world can be wonderfully funny. As secondary characters in a comic story, children have no peers. Many a dull story that has gone dead in the mind of the artist has been saved by the addition of a kid character to give it new life.

When drawing children or creating a story for them remember that children are *not* small adults. To draw a convincing child the proportions must be right for his or her age. Also, one must keep up with the styles. Children's dress changes almost as much as their mother's. Especially is this true of teen-agers. Teen-agers seem to spend most of their time trying to add to — or take away from — their dress to make themselves stand out from the crowd. This goes for the boys as well as the girls. A cartoonist who is drawing a teen-age strip must keep his ear to the ground of the High School campus.

The cartoonist must study the psychology of the age group he is working with. Children just don't think or act like adults. They live in a world of their own. To be successful, the cartoonist must invade this world and attempt to capture its peculiarities and charm and transfer them to the drawing paper. Not only must he capture their mental outlook, but he must put across their vocabulary and their physical actions with fidelity.



Children's slang also changes from day to day. There is nothing deader than yesterday's slang, and the cartoonist must be doubly sure that the words he is putting in his character's mouth are not out of date. The radio, television and movies will usually give you a tip-off as to what is coming out of the mouths of babes this week.

If only adults were reading the comics the artist wouldn't have to worry too much about how he handles children in his feature. But kids themselves are avid comic fans. Teen-agers love to read teen age strips—and if things aren't going just as they think they should they will soon let the artist know what they think is wrong.

Remember that children are more flexible than adults. Their muscles and bones don't seem to have any limitations. Children never stand or sit still. They are constantly on the move. Exaggeration of action is expected by your reader when you draw children. Here again your sketch pad must be put to use. Go down to the nearest playground or school and spend some time making fast, rough sketches of children in action. One or two hours of sketching will give you enough material to work with at home for a month. When you make finished drawings from your rough sketches of children try to keep as much of the freedom of line and motion as you can. Too many artists freeze up on the pen or brush when they're making the finished drawing, and thereby lose all the nice lines of their rough pencil sketches.

Each of your faculty members has created several kid drawings for you in this lesson. You will notice that no two of them have drawn children the same, but in each case there is no doubt that they are children, as distinct from adults. When you are drawing children be sure that they fit in with the rest of your work. Naturally, if you are drawing them, they will have characteristics peculiar to your work. But, if you have created a special style for any one particular job, be doubly sure that the children you add are drawn in the same style.

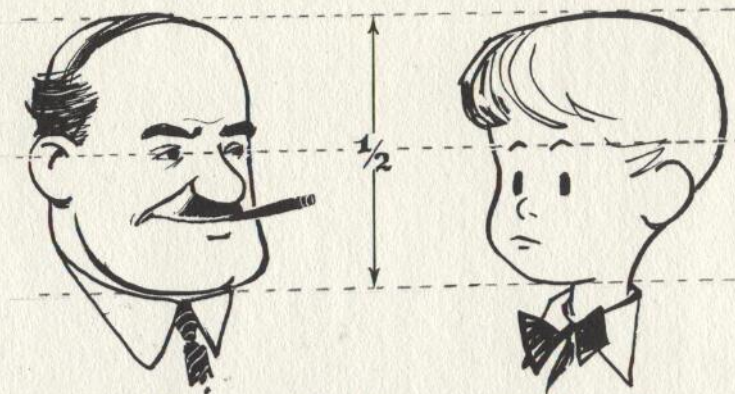
When drawing children it is well to remember that where there are children there are pets. Here is where your knowledge of animals will help you create realism. Props, from plastic ducks to hot rods, should be authentic when used around children.



## Kids are different

When drawing children you must remember that their proportions are different from an adult's. A kid's head is larger in relation to the height of his figure, the neck is thin and, up to the age of four or five, the arms and legs are short and chubby.

Kids don't just walk — they hop, skip, jump and, at times, drag their feet, but always with action. A normal living room is a gymnasium for them. This page shows some useful pointers.



Using the eyes as a dividing line, you can see that the child has more head above the eyes than below. His eyes are large and his nose is small in relation to the size of the face

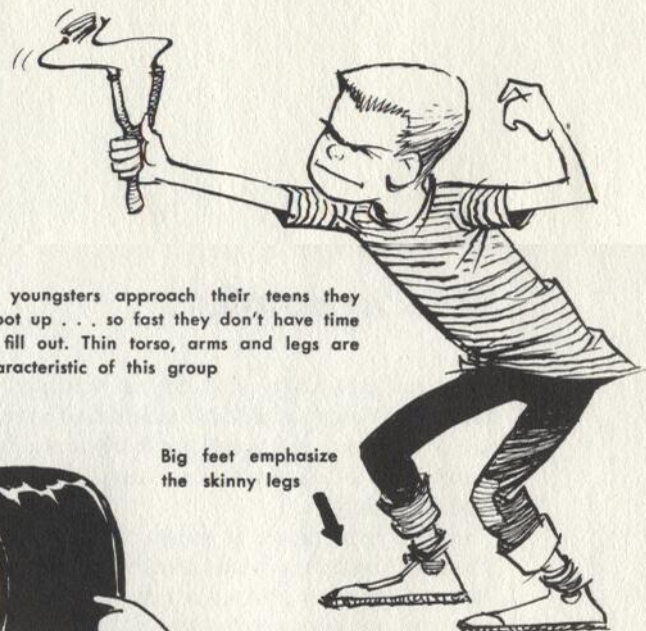
Remember: where there's kids there's dogs



Keep outlines smooth . . . simple



As youngsters approach their teens they shoot up . . . so fast they don't have time to fill out. Thin torso, arms and legs are characteristic of this group

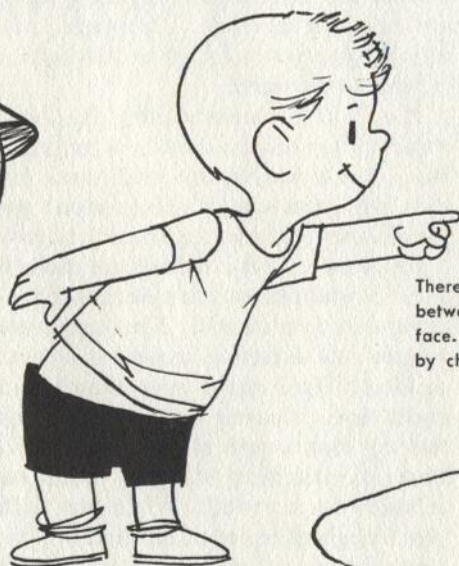


Big feet emphasize the skinny legs

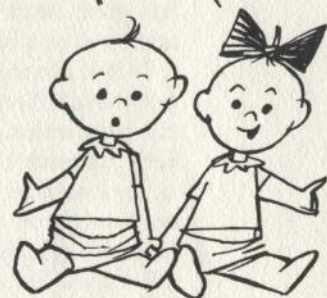
Babies are mostly head . . . and stummick



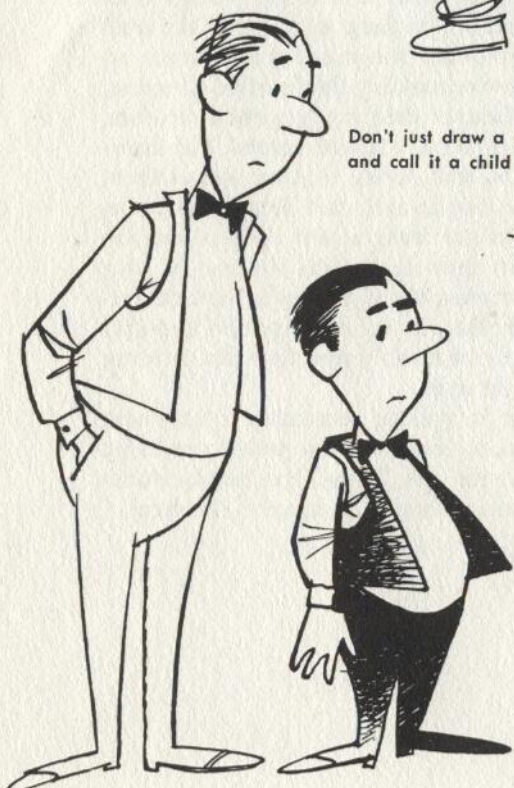
There is very little difference between a small boy's or girl's face. You can change the sex by changing the hair



IN OUR SET IT TAKES A HAIR RIBBON TO SHOW THE DIFFERENCE!



Don't just draw a small adult and call it a child



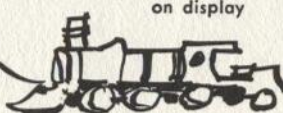
Are you a midget, Mithler?



Keep your kids moving — real ones never stand still



Normal children are active, curious and like to get into things. They are not dolls on display





This page was designed to show the changes in the relative proportion of the head and features at different ages



**AT ONE YEAR** the head is large in proportion to the face and features which seem enclosed by chubby, full cheeks. The eyes are placed lower on the head. The chin and nose are quite small and the neck is short and fatty. The eyebrows on an infant of this age are very light



**AT SIX YEARS** the head seems smaller in proportion to the face which is growing larger with the chin becoming more pronounced. The mouth and the nose show a more definite shape at this age and the neck is growing longer



**AT ELEVEN YEARS** a pronounced change has taken place. The head is definitely smaller in proportion, the face has lengthened with the jaw and chin becoming quite definite. The nose has grown longer and the eyes are placed higher. The mouth assumes a firmer quality. The neck grows longer and begins to develop



**AT SEVENTEEN** we have almost an adult head with adult proportions. The eyes, lips, nose and chin having developed almost to their full size, now begin to show definite characteristics while the jaw and cheekbones assume much more prominence with the construction of the neck also becoming more pronounced



## Babies

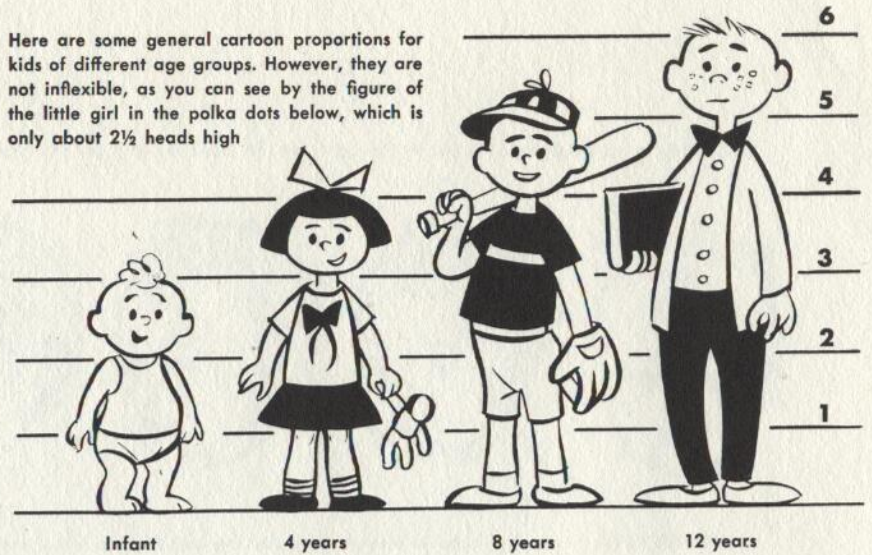
The simplest way to teach children's proportions is by the "heads high" method — expressing the height of the figure in terms of the number of heads it is high.

Illustrators, concerned with drawing kids realistically, as on the preceding page, use ideal proportions for the different age groups. These proportions are: at birth nearly 4 heads high, at one year  $4\frac{1}{2}$  heads high, at four years  $5\frac{1}{2}$  heads high, at eight years a little over 6 heads high, and at twelve almost 7 heads high.

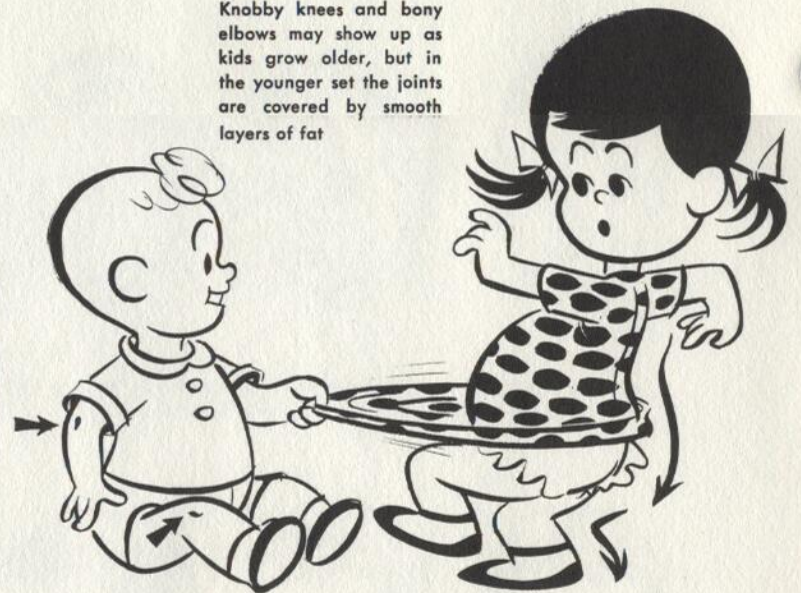
However, we're cartoonists — not illustrators — so for comic effect we take liberties with these "ideal" measurements and exaggerate them as illustrated in the diagram at the right.

When you draw babies, the important things to remember are: the small, fat face low on a large head, the smallness of the pudgy hands and feet, and the soft plumpness of the overall figure. Try sketching them from life. They make excellent models — they stay in one place and don't criticize your work.

Here are some general cartoon proportions for kids of different age groups. However, they are not inflexible, as you can see by the figure of the little girl in the polka dots below, which is only about  $2\frac{1}{2}$  heads high



Knobby knees and bony elbows may show up as kids grow older, but in the younger set the joints are covered by smooth layers of fat



Dimples instead of bone appear at elbow and knee joints

Your very young children will look their age if you exaggerate the long torso and short legs characteristic of the group



Short arms and legs — keep 'em plump

Keep face and features small in relation to overall size of head

Around New Year's Day this little guy is a must

W. H. M. M. M.



## 5 - 8 years old

Between the ages of five and eight children stay fairly close to home and mother. They are still at an age when they need baby-sitters. These children are human beings before they grow up and get grumpy. They ask questions and demand answers which give cartoonists wonderful material. Keep tuned in on the doings of the kids in *your* neighborhood.



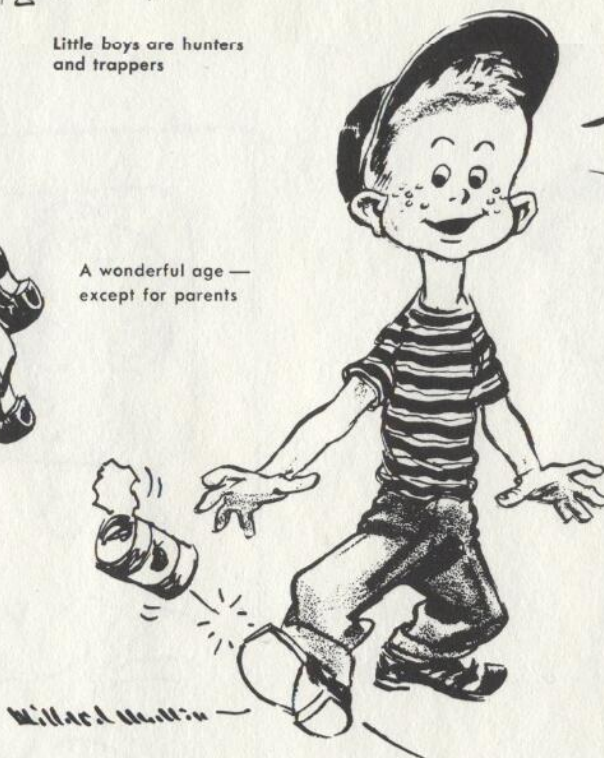
Little girls have the maternal instinct



Little boys are hunters and trappers



A wonderful age — except for parents



Willard Mullin



A five-year-old with erroneous dietary ideas



MILTON CANIFF





## 9-12 years old

Between nine and twelve most kids start to get around more on their own hook. They are no longer babies: their faces take on more character and their figures and nicknames can fluctuate between fat and skinny. They join the Scouts (don't forget the Girl Scouts!) and jump whole-heartedly into fads and hobbies that are tough on parents. Box tops are big business in this league. They read the comics and *like* the ones that have action and are funny. Love interest means nothing in their young lives: in the movies they like you'll notice that the cowboy kisses his horse, not the heroine.

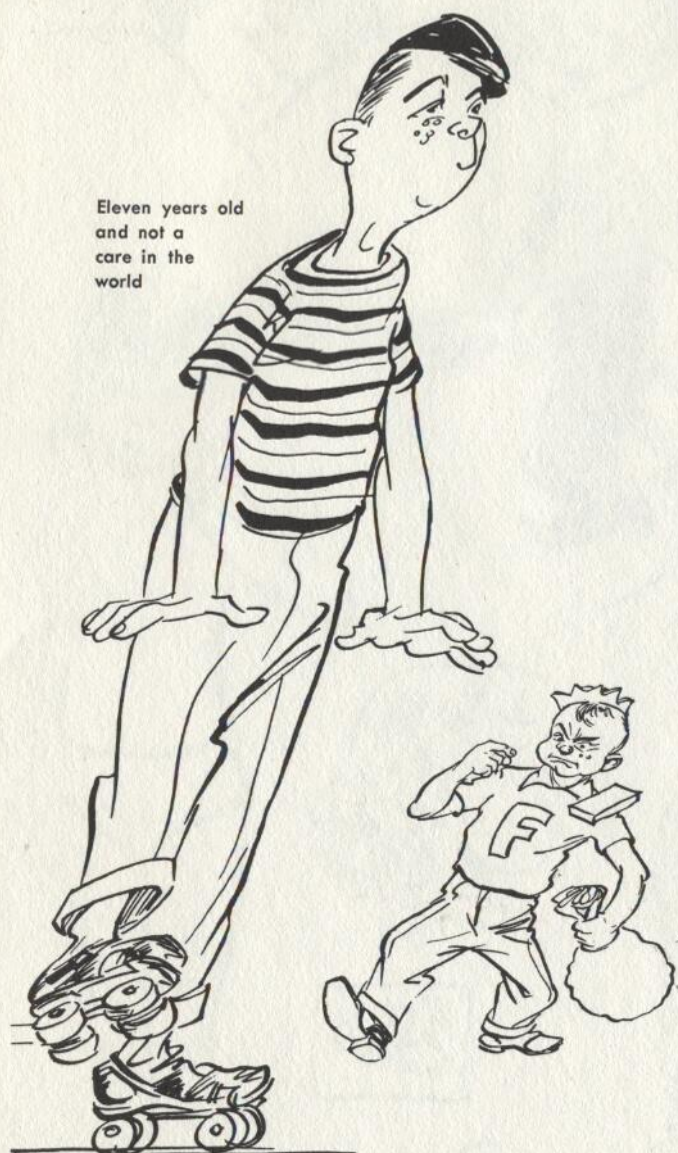
Some cartoonists, mostly without children of their own, have been known to become *too* sentimental about their ink-and-paper kids. Willard Mullin has a good, common-sense word on this:

"Babies are cute and I'm reasonably fond of them. With that statement off my chest, I believe I can safely say that there are, however, a good proportion of small monsters taking refuge behind their youth. Same way with children of all ages. In the process of growing up, it has been my experience that some kids

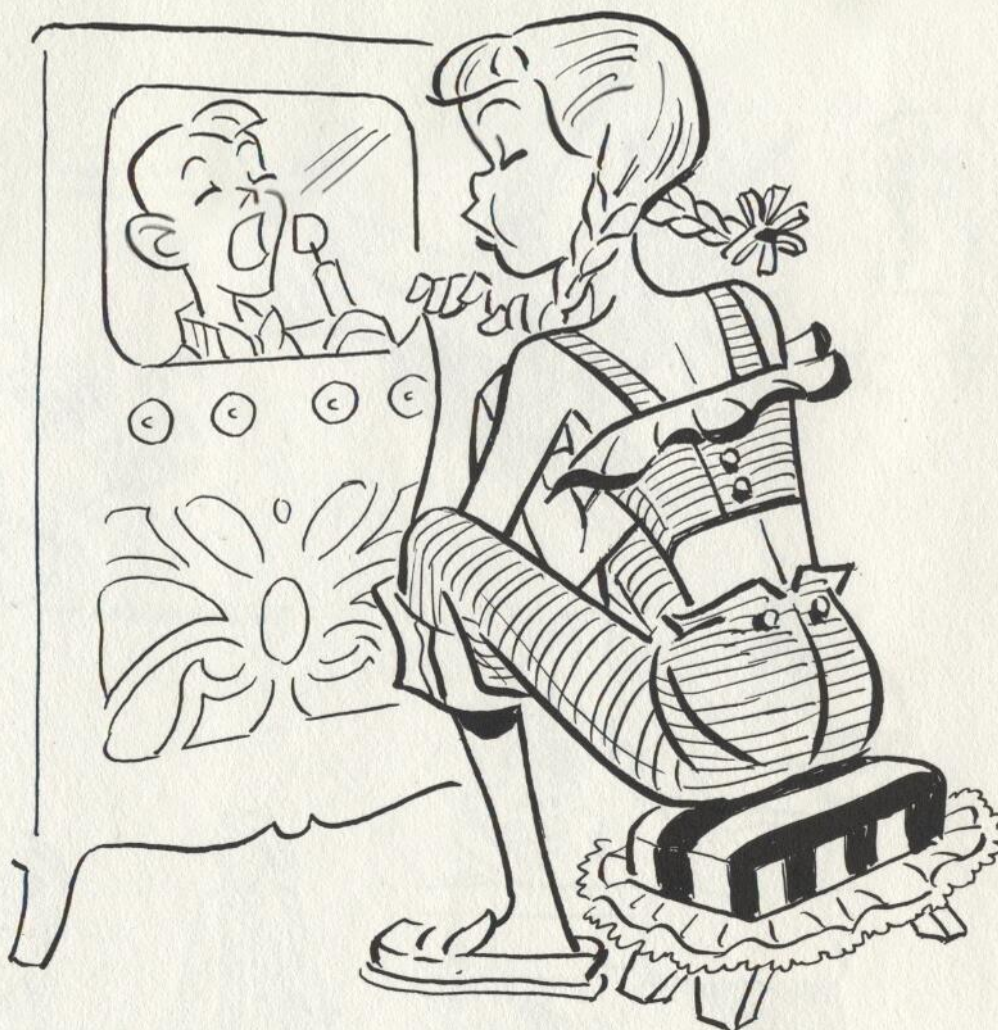
were likable and made enjoyable companions — while others were liable to throw rocks and steal catcher's mitts. What I'm trying to say is that children are *people* — they aren't just decorative little china dolls. They are human beings and have juvenile but *human* reactions that make good ammunition for cartoon ideas."

In the adventure strip business, when Steve Canyon and the world he lives in get a little too hard-boiled, Milton Caniff finds that a bit about children can supply a light, warm touch that is the perfect psychological foil for grown-up skulduggery.

As you see, we have included a large percentage of girls in our examples. There is a reason for this. Because most cartoonists grew up, if any, as boys with a masculine view of things, you find a lot more young males than girls in their cartoons. A smart cartoonist, however, will remember that half his customers are ladies. If you leave half the human race out of your work you are only using half the available material.



Eleven years old  
and not a  
care in the  
world

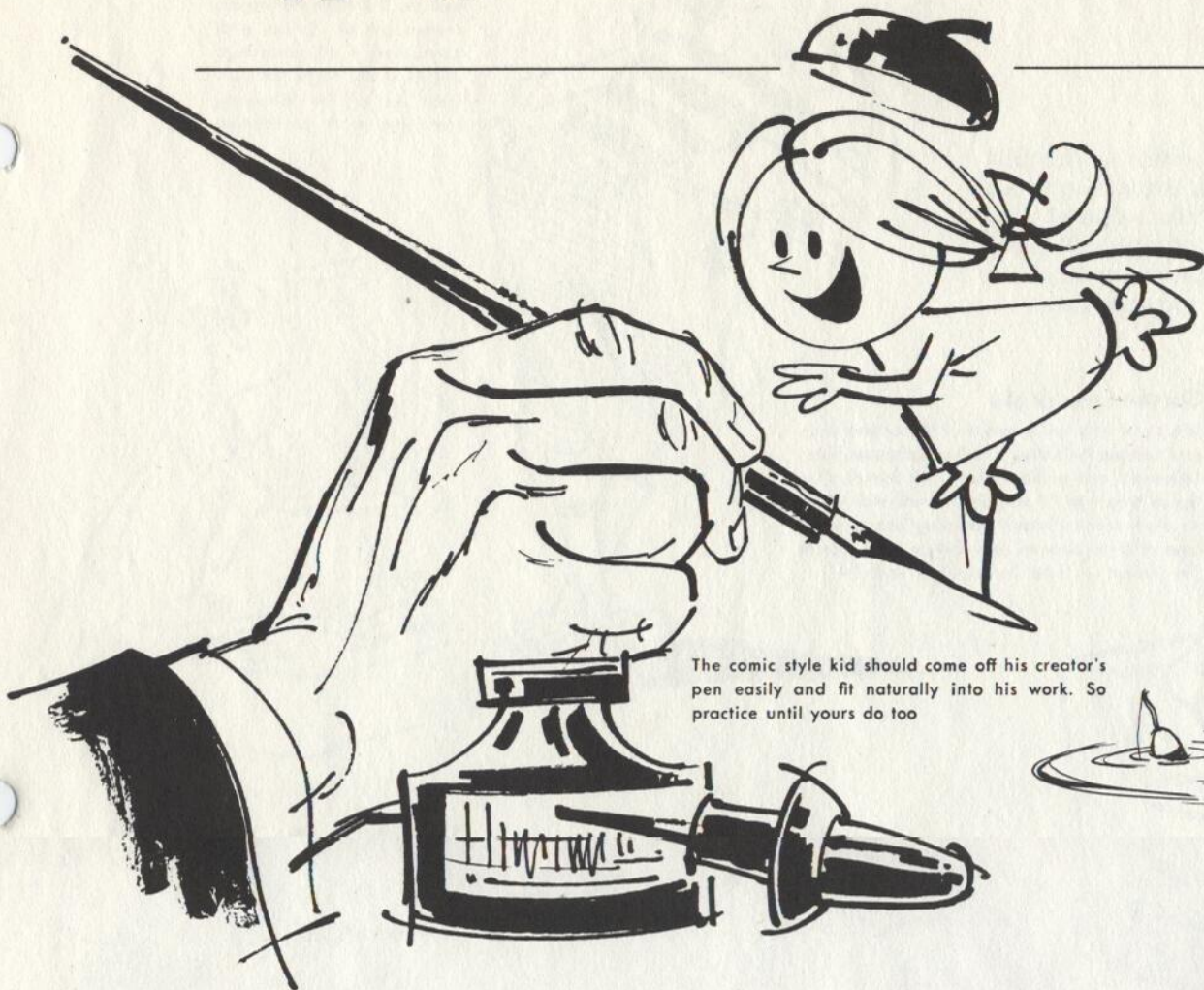


HAENIGSEN

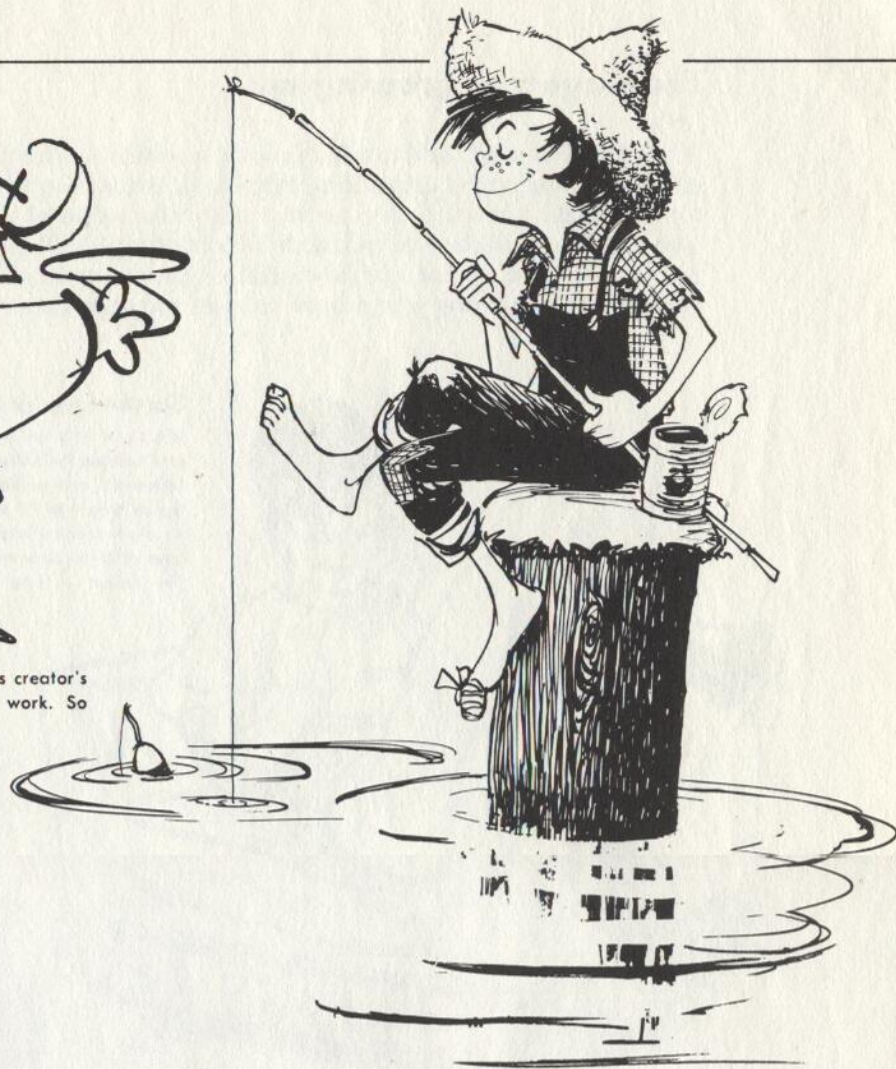
## Ten years old

Most young ladies are considerably more interested in softball and food than in crooners. On television she much prefers the Lonesome Wrangler





The comic style kid should come off his creator's pen easily and fit naturally into his work. So practice until yours do too



Reading becomes a pleasure instead of a task



MILTON  
CANIFF



They never get tired  
at this age





## Teen-agers — growing up

The transition from child to adult is not easy, either for the child or the cartoonist who draws him. Physically, the teen-agers are almost adults. Mentally, they are in a delightful world of their own which avoids many of the harsh facts of adult life. Remember to give them action and be careful of current style crazes. Have fun remembering your own teens when you draw them.



### Sixteen years old

She's now very much aware of clothes and boys (not necessarily in that order) and discusses them intimately and endlessly with girl friends. Her figure begins to fill out. She's struck with terror as she envisions herself becoming obese in the eyes of boys. So every new dietary fad captures her interest... if not her complete devotion



### Thirteen years old

Comes the age of thirteen and the first faint stirrings of awareness of clothes and boys. Food is still paramount but here she starts the constant use of the telephone that goes on for her lifetime



At seventeen — how would a moustache look?

## They're extremists

Like pendulums, members of the teen-age set swing from one extreme to the other. Their clothing is too loose or too tight, their hair too long or too short and their manner either too boisterous or too bashful... in short, they're just too much! They accept and reject fads with bewildering speed, so a cartoonist, to depict them accurately, must be constantly aware of what is "in" and what is "out" with them



With girls it's either way up or way down



With boys it's either no hair... or mohair!



Their clothing fits either like the "sack"...

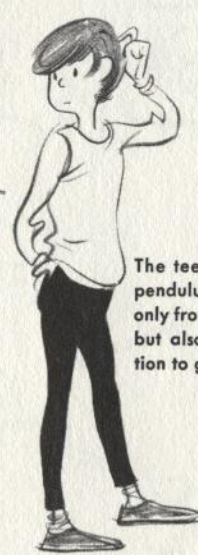
...or like the proverbial glove



Grandpa, as a teener, favored long jackets and tight trousers



His son adopted the short coat and shoe-concealing "Oxford bags"...



...while his grandson reverts to "skinny" pants even tighter fitting than those Gramps wore



Grandma, as a flapper, wore her skirts and her hair extremely short and rolled her hose below the knee



Her daughter did just the opposite



Granddaughter's hip-high hosiery is longer than Mother's but her skirts are briefer

The teen-age fashion pendulum swings, not only from year to year, but also from generation to generation



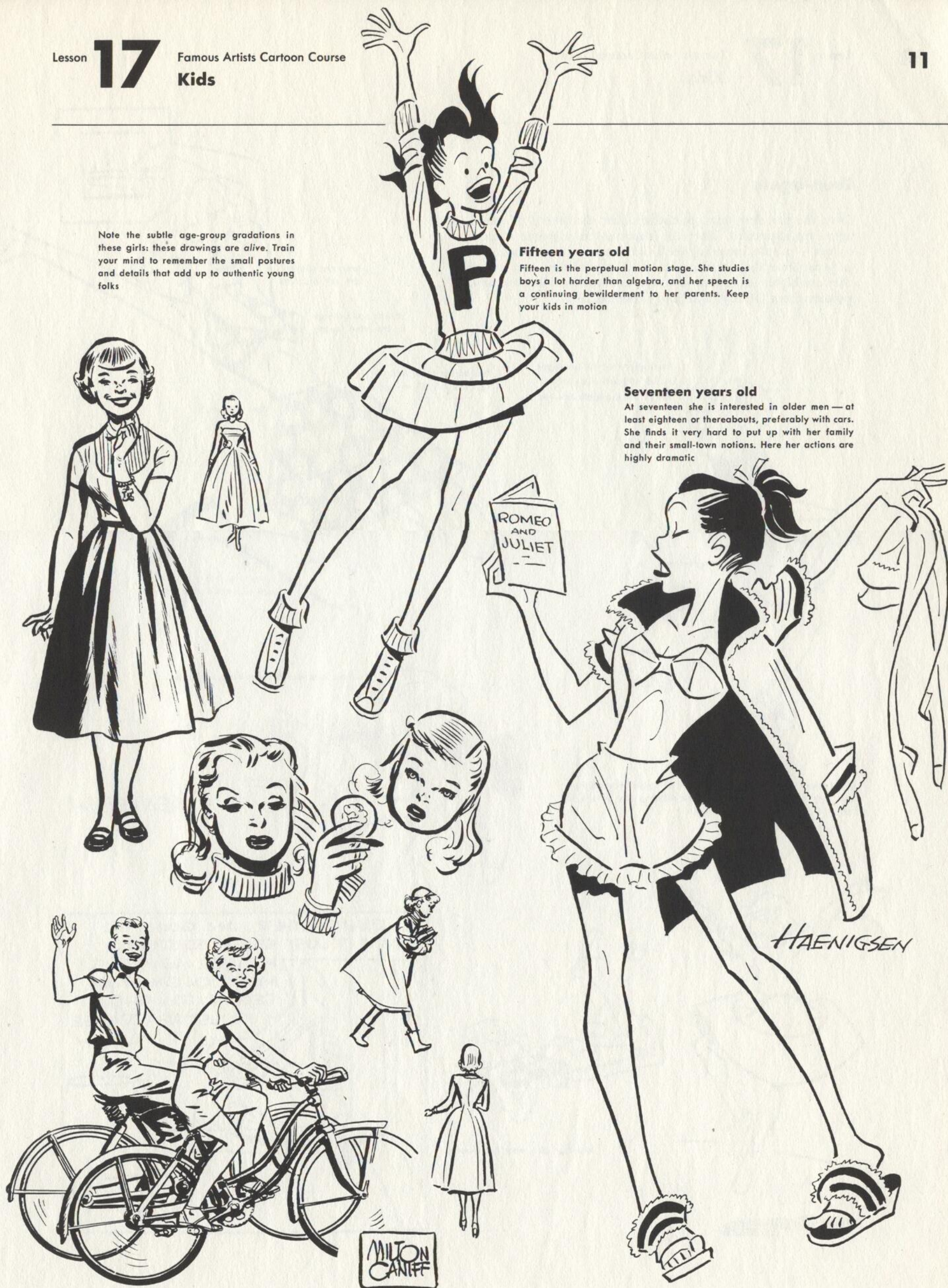
Note the subtle age-group gradations in these girls: these drawings are alive. Train your mind to remember the small postures and details that add up to authentic young folks

### Fifteen years old

Fifteen is the perpetual motion stage. She studies boys a lot harder than algebra, and her speech is a continuing bewilderment to her parents. Keep your kids in motion

### Seventeen years old

At seventeen she is interested in older men — at least eighteen or thereabouts, preferably with cars. She finds it very hard to put up with her family and their small-town notions. Here her actions are highly dramatic



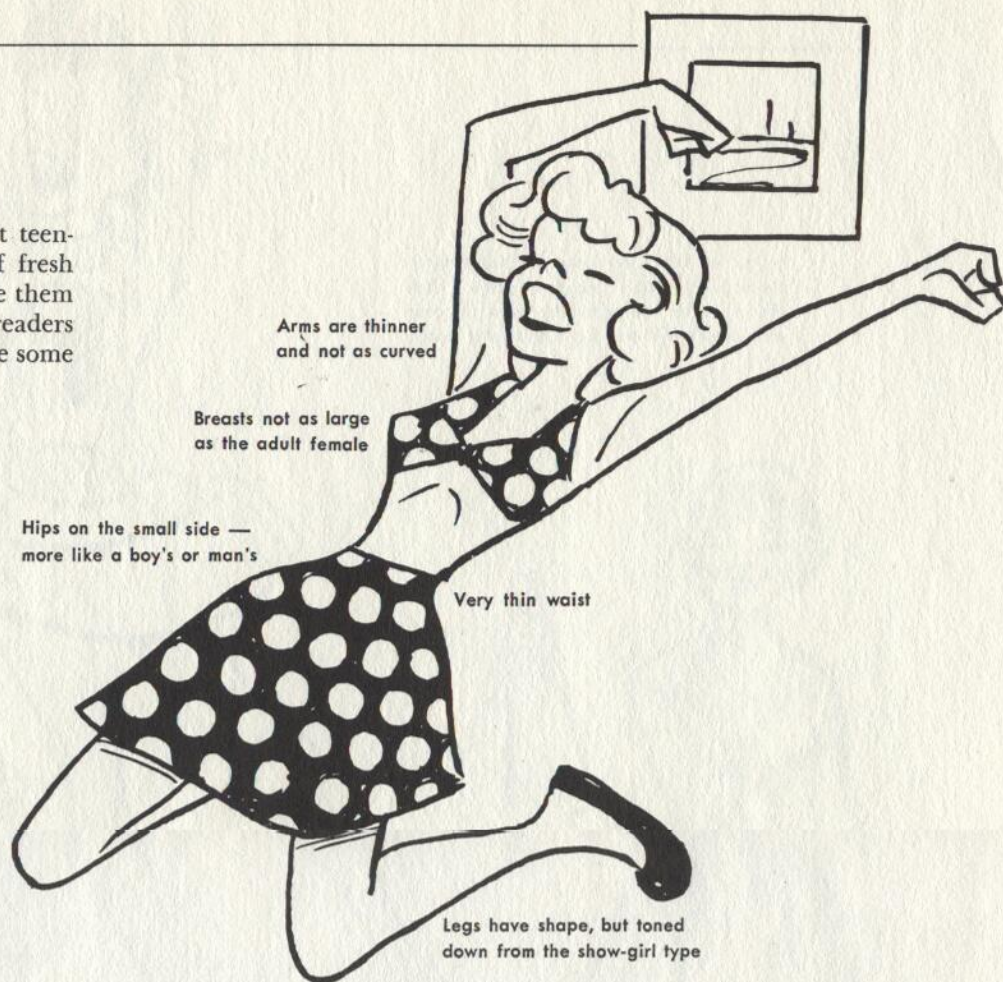


## Teen-agers

Over the past few years, publishers have discovered that teen-agers are important. They are important as a source of fresh humor — people, including the kids themselves, love to see them in print. Since they are important both to publishers and readers they are highly important to you as a cartoonist. Here are some pointers from "Penny" and Harry Haenigsen.



Remember that the teen-ager is full of youth and pep — she is not a smooth doll yet



Arms are thinner and not as curved

Breasts not as large as the adult female

Hips on the small side — more like a boy's or man's

Very thin waist

Legs have shape, but toned down from the show-girl type

When you draw teen-agers, remember their style of dress changes from day to day. Each group has bewildering new fads which you must keep up with in this field



The teen age face is cute with plenty of hair

HAENIGSEN

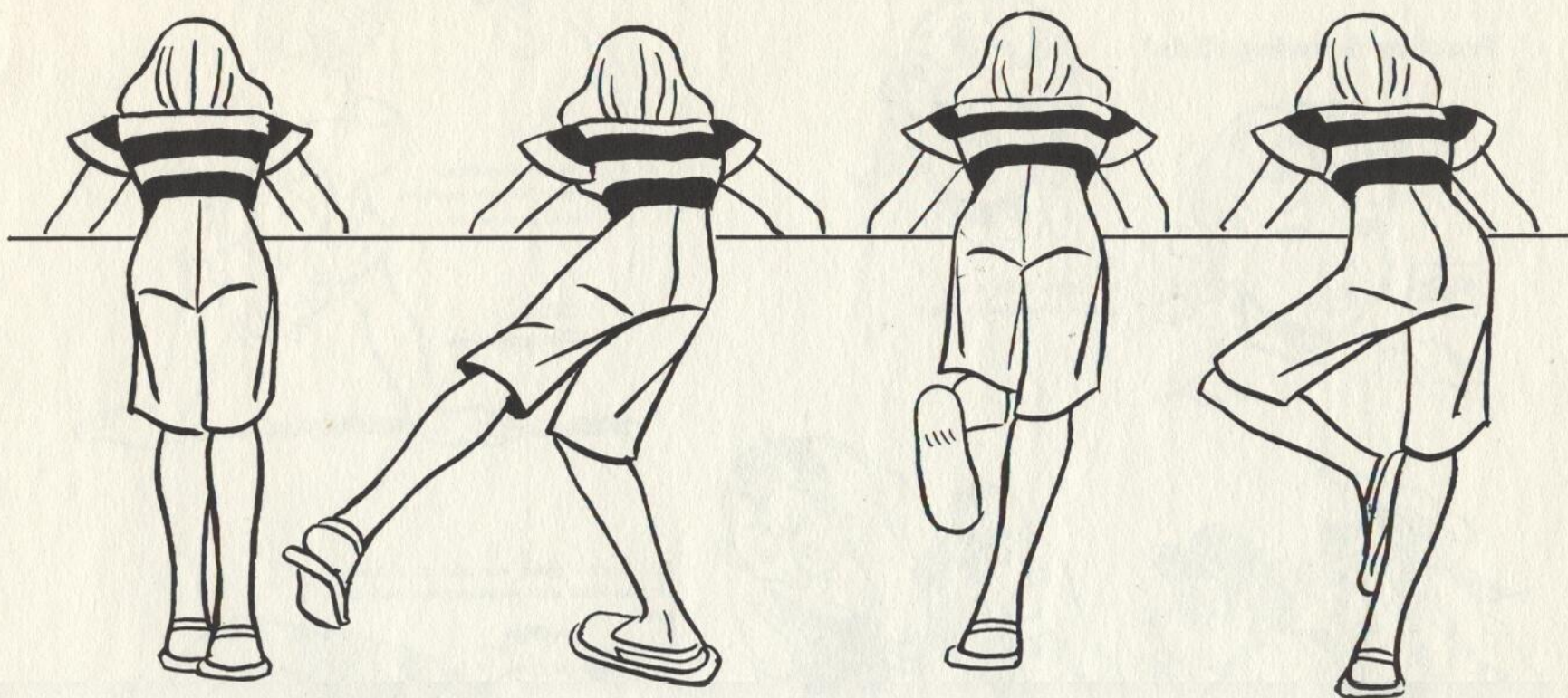


Teen age girls wear flat shoes



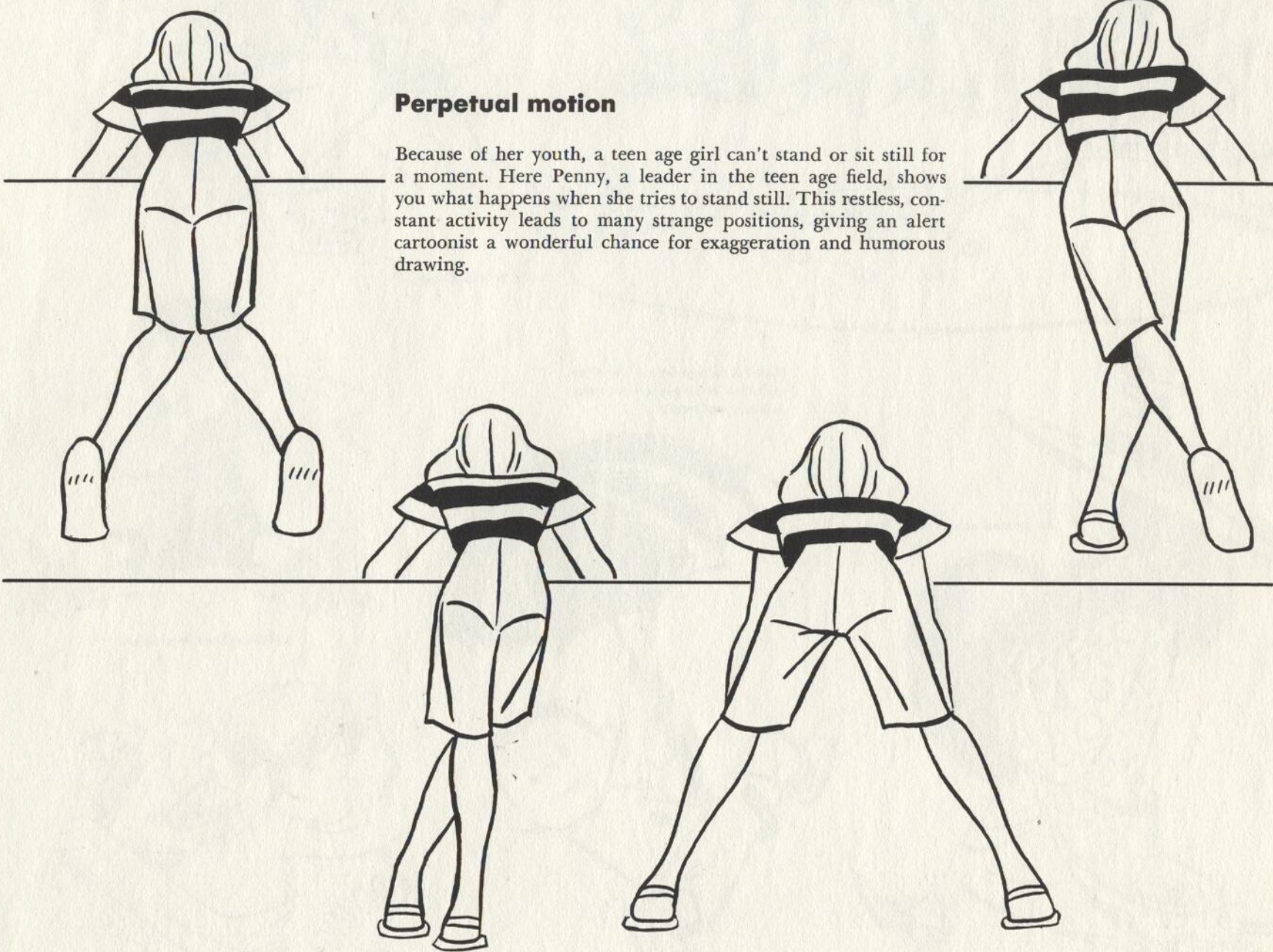
ALL RIGHT, MOTHER, I AM GOING TO START. IT JUST SEEMS SO UTTERLY FUTILE, I MEAN, THE MOST YOU CAN EVER SEEM TO DO WITH DUST IS JUST REARRANGE IT!





### Perpetual motion

Because of her youth, a teen age girl can't stand or sit still for a moment. Here Penny, a leader in the teen age field, shows you what happens when she tries to stand still. This restless, constant activity leads to many strange positions, giving an alert cartoonist a wonderful chance for exaggeration and humorous drawing.

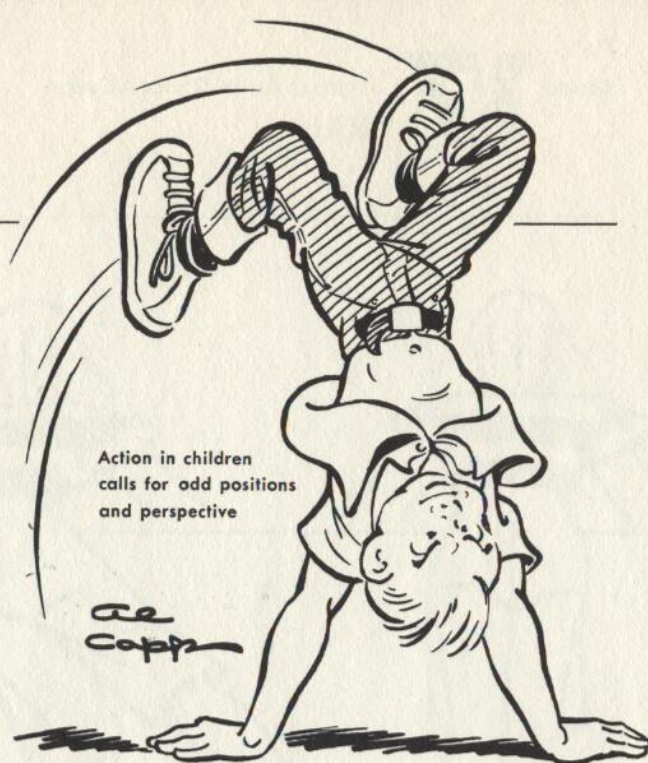




Practice drawing Kids!



Little girls strike a soft spot in everybody's heart



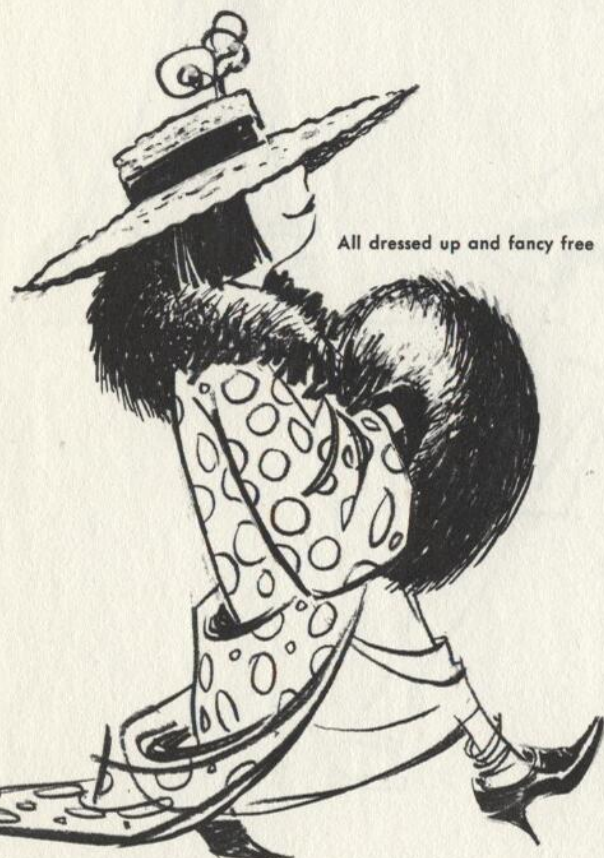
Action in children calls for odd positions and perspective

ae  
Coppa



This marble game was part of a football cartoon—the kids representing small local teams

Richard Muller



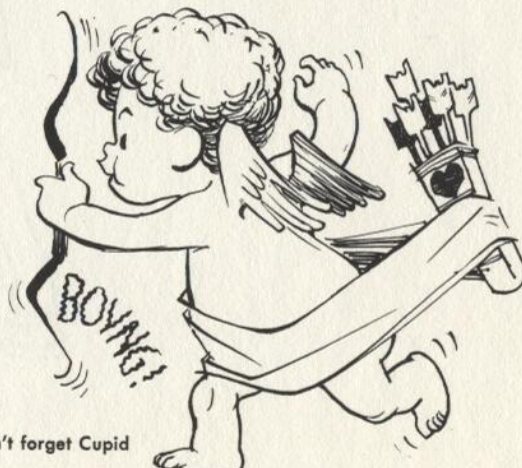
All dressed up and fancy free



Kids like to experiment. This often gets them into trouble—but make it funny, not tragic



Childhood has its problems



Don't forget Cupid



FAMOUS ARTISTS CARTOON COURSE  
Student Work  
Lesson 17

To study and practice

Our aim in preparing this lesson was to make you see the importance of including kids in your cartoon stories and to equip you with the knowledge you need in order to draw them correctly from the start. Remember: People love kids, and most of your readers will be people. Kids are an economic must for cartoonists.

For practice, put to work in your own drawings what you learn from the text and examples in the lesson. Then, for more practice (and it's fun, too), get out with a pencil and sketch real kids in action. Boiling these sketches down into ink drawings will provide you with a brood of cartoon children that you can really call your own because they fit into your own style. A peek ahead at Whitney Darrow's work in Lesson 24 (pages 20 -- 31) will give you an inspirational boost in this matter of sketching children for cartoons.

Our criticism of this assignment will be based mainly on the way you handle the children. However, at this stage of the course, we will feel free to comment on any or all of the points covered in previous lessons -- composition, perspective, props, etc., and especially figure action and facial expression.

The assignment you are to mail to the School for criticism

ASSIGNMENT

On a sheet of 11 x 14-inch Bristol board, ink a panel 8 inches high and 10 inches wide. Then draw the following scene: In a modern kitchen, a five-year-old is feeding a sardine sandwich to a baby, to the horror of a teen-age girl baby-sitter, while an eleven-year-old boy is helping himself to the contents of the refrigerator. Make the scene as lively and interesting as you know how, and use a pen or brush for inking.

Present your assignment in the same clean, professional manner you would use if you were submitting it to the cartoon buyer of a publication. Letter your name, address and student number carefully in the lower left-hand corner of each page. In the lower right corner, place the Lesson Number. Mail to:

FAMOUS ARTISTS CARTOON COURSE  
Westport, Connecticut



**Famous Artists Cartoon Course**

**Westport, Connecticut**

**Lettering**

Lesson

**18**

Rube Goldberg

Milton Caniff

Al Capp

Harry Haenigsen

Willard Mullin

Gurney Williams

Dick Cavalli

Whitney Darrow, Jr.

Virgil Partch

Barney Tobey



BALLOON  
LETTERING MUST  
BE SHARP, CLEAN AND  
EASY TO READ!

BALLOON  
LETTERING MUST  
BE SHARP, CLEAN AND  
EASY TO READ!

BALLOON  
LETTERING MUST  
BE SHARP, CLEAN AND  
EASY TO READ!

BALLOON  
LETTERING MUST  
BE SHARP, CLEAN AND  
EASY TO READ!

abcdefghijklmnopqrstuvwxyz

ABCDabcef

*The Quick B*

ABCDEF

ROUND BRUSH CUT SQUARE

*San Francisco eats well, has fun after dark*

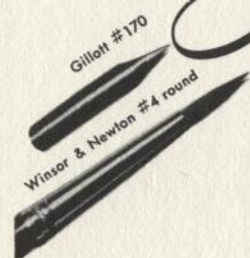
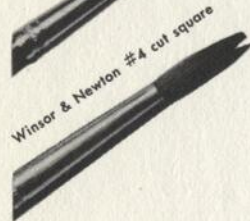
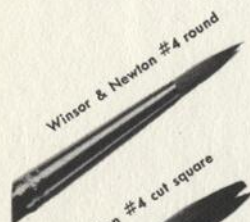
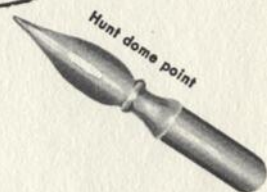
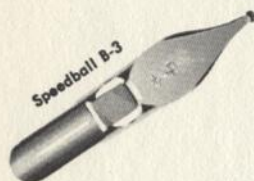
Old Gold

*Nearly 200 years of Blending Skill  
applied to the World's Finest Tobaccos*

*More people smoke Camels than ever before!*

#### Tools style letters

In order to draw a particular style of letter, you must know and choose the tool that most closely approximates the weight of the letter you wish to execute; don't try to make a tool do work that is outside its natural, physical limitations. When the above styles are drawn it will be found that a round tool will make an unvarying weight and that a flat tool will execute thick and thin strokes. Remember, the type of tool will "style" the letter





## The importance of lettering

Lettering is important for you because it helps your cartoon tell its story, whether it is a humorous feature or a mailing piece for a local club. Look at the percentage of space in modern cartoons which is taken up by balloon and other kinds of lettering. Different kinds of lettering are used to tell different kinds of stories. It is important for you as a cartoonist to be able to choose and do the kind of lettering that will tell *your* story best.

For practical use by cartoonists, we have divided lettering into two categories: balloon lettering and display lettering. Balloon lettering is the kind used in most cartoons — easy to read, well-formed alphabets of capital letters. The other is display lettering. It simply means lettering used for any other purpose than balloon lettering. You will use these larger and more carefully formed letters for special parts of your cartoons, such as headings, signs on streets, gravestones, trucks, or for advertising headings, show cards, posters, and so on.

In balloon lettering speed and *clarity* are the most important elements. This lesson emphasizes the fact that *your* balloon lettering is going to be reduced in size *when it is printed*. Make it a habit to rule guide lines and *keep* your letters uniform and well spaced, so that they *are* easy on the reader's eye.

It's true that *most* successful comic strip men have an assistant to *do their* lettering. But, it is also true that each and every *one* of the men at the top is perfectly able to do his own lettering. The assistant merely saves him valuable time. If you are lucky enough to get a crack at being an established cartoonist's assistant, you *must* be able to letter as well as the boss, preferably better.

Like handwriting, your lettering style will develop naturally as you practice the standard alphabets — don't try to hurry it. Study the work of other cartoonists and you will see that their lettering has a definite tie-in with their style of drawing. Willard Mullin's lettering is perfect for his work, but good as it is, it wouldn't look right in the balloons of Harry Haenigsen's *Penny*. As you develop a style of drawing, you also develop an individual style of lettering. This is good, because your styles of drawing and lettering, like ham and eggs, should go together.

Naturally, the type of cartooning you are interested in will influence your lettering. However, for the sake of your bank balance it will never hurt you to learn to handle all types. There

is no quicker or easier way for a beginning cartoonist to pick up a few extra bucks than by doing display lettering. Most businesses use small signs in their displays. If you can letter *and* toss in a comic face or figure, it's that much easier to get the job.

Display lettering alphabets are generally modelled after established printers' type faces. "Type Face" means one of the many styles of cast metal alphabets which printers use in their work. We give you some good alphabets on the following pages and recommend that you pester your local printer for *some of* his old type-specimen books. Most printers are *glad* to help if they see you are truly interested in *learning more* about their beloved business. Also, both the Higgins Ink Co. and the Hunt Pen Co. publish excellent, *inexpensive* books which will help you with all *sorts of* special lettering styles.

On the opposite page you see some examples of display lettering done by experts. As a general rule, after using a large tool to form large letters for reproduction, you clean up the rough edges, fine lines and serifs with a finer pen or brush. These corrections, though subtle, add greatly to the finished appearance of the lettering. The Camel caption is an example of this way of working. The free letters were written quickly with a round brush with the concentration put on producing a pleasing design; then rough edges and bad weights were corrected with a fine pen. In styles such as this, where a certain freeness is desirable, much of the work's character would be lost if the lettering is traced down on another working surface. Another important tip for the beginner is to make sure that all the letters in the word belong to the same alphabet. Keep specimens of complete alphabets before you as you practice.

Any lettering can be corrected with a razor blade or Chinese white, but the less of this the better it will look. For clean work, get the good habit of wiping your pen regularly. Remember too, that old ink that has been left open for a time will gum up your pen point. If you have trouble making a clean pen line, try a new bottle of ink before you throw the pen point away.

Lettering is like all the rest of cartooning — you learn to letter by *lettering*. All we can do is show you how it is done. We can't practice for you. How good you will become will depend on the amount of time and care you spend on it.

Rr

**Gothic**

All elements of the letter are of equal width

Rr

**Roman**

Letter made up of thick and thin elements

Rr

**Script**

Letters thick and thin, based on handwriting



"Serifs" are the little spurs on the letters



## Balloon lettering

Every cartoonist, regardless of his special field, must be able to do balloon lettering. At some time every professional will get jobs that call for his characters to speak in balloons. While individual styles in lettering may differ, the same basic rules apply to *all* balloon lettering.

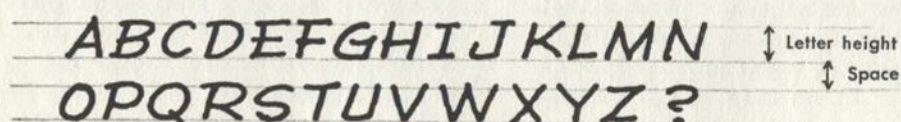
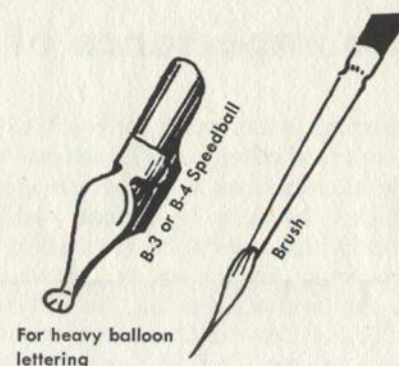
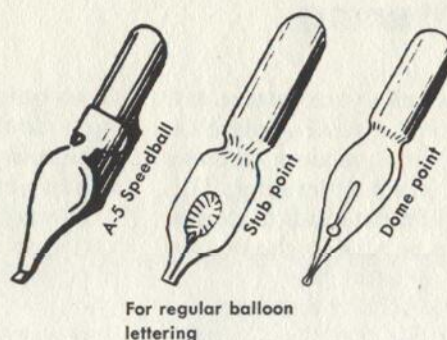
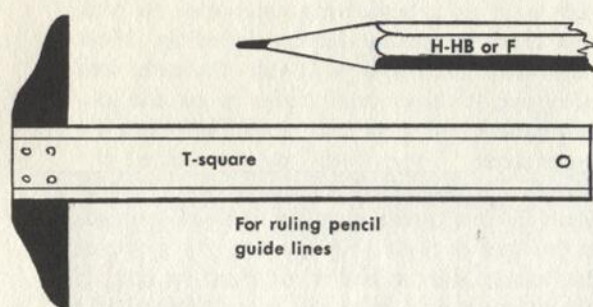
Most important, it must be easy to read *after* it is reduced and printed. Careless, uneven or badly spaced lettering will look even worse when it is reduced. Well spaced, neat lettering will take almost any amount of reduction and still be easy to read.

Remember, too, that your readers read *words*, not letters. Spacing and forming the letters into words is as important as

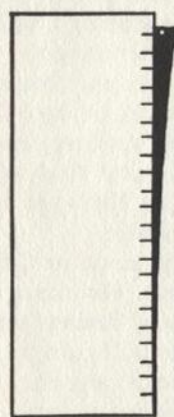
forming individual letters. Each word is a unit made up of individual letters — when it is properly designed it will be seen and easily read as a unit.

Evenly spaced guide lines are one of the greatest helps to the easy readability of your balloon lettering. First, the height of the letters in each line must be the same. Second, the spaces between those lines must be equal throughout the job. About  $\frac{2}{3}$  the height of the letters makes a good, clear space between lines of lettering. Keep your pencil lines light: remember you have to erase them when the job is done. Here you see a simple, effective method of spacing to keep your guide lines consistent.

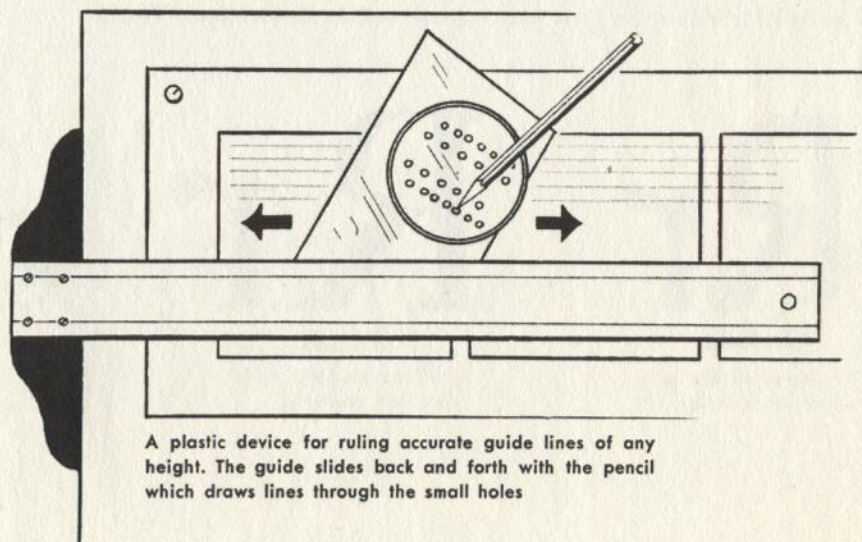
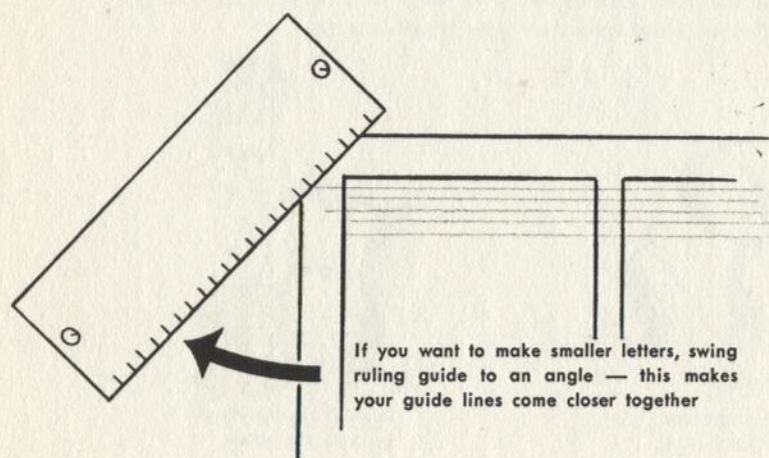
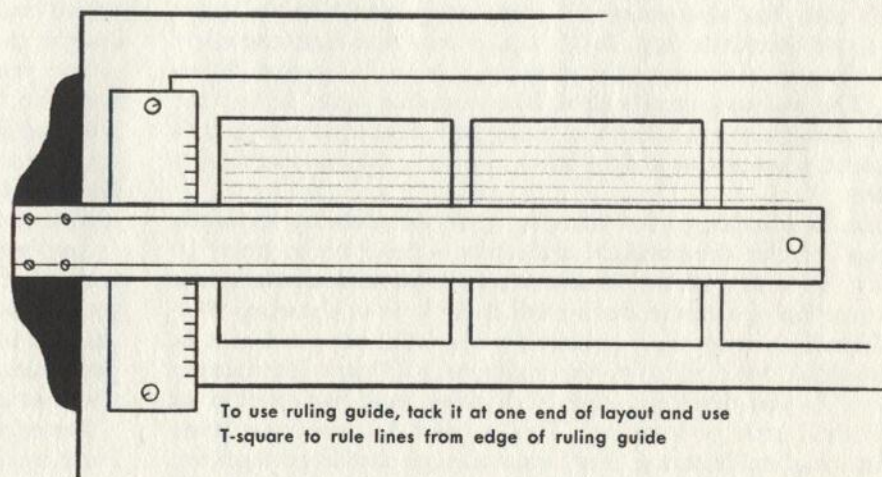
### Tools



The space between lettering lines should be at least two-thirds of the letter height



Make a ruling guide by inking correctly spaced guide lines along one edge of an oblong piece of Bristol board





## Forming the letters

Balloon lettering is a single stroke alphabet: that is, each part of the letter is made with a single stroke of the pen. It is not outlined and then filled in. Some letters, like the *E* will require two or more strokes, while the letter *S* is completed with one continuous stroke. In the balloon alphabet on this page you can see the normal direction of the strokes used to complete each letter.

The exercises here are based on the actual pen strokes used to form the letters of the alphabet. Practice them until you can make the strokes easily and naturally. Work on ruled, spaced lines and keep your pen strokes within their limits.



### Seven basic strokes

There are only seven basic pen strokes used in forming all of the letters of the balloon alphabet: 1. vertical, 2. horizontal, 3. slant to the right, 4. slant to the left, 5. curve to the right, 6. curve to the left, and 7. the double S curve which in balloon lettering is made with one stroke. Arrows indicate direction of stroke

### Basic practice strokes (actual size)



### Basic balloon alphabet (enlarged)



ABCDEFGHIJKLMNOPQRSTUVWXYZ

To familiarize yourself with the alphabet, rule guide lines and ink the complete alphabet two or three times. Make the strokes in the right directions and see how they combine to form letters

### Do's and don't's (enlarged)

In the GOOD column we show you some acceptable variations on the type model. When the variations are stylized to the point of being hard to read they become BAD.

| Type | Good | Bad |
|------|------|-----|
| A    | AAA  | AAA |
| B    | BB   | BBB |
| C    | CCC  | CGC |
| D    | DD   | DDO |
| E    | EEE  | EIE |
| F    | FFF  | F#F |
| G    | GGG  | GGG |
| H    | HH   | HHH |
| I    | II   | iI  |

| Type | Good | Bad |
|------|------|-----|
| J    | JJJ  | JJJ |
| K    | KK   | KKK |
| L    | LL   | LLL |
| M    | MMM  | MMM |
| N    | NNN  | NNN |
| O    | OO   | OOO |
| P    | PPP  | PPP |
| Q    | QQQ  | QQQ |
| R    | RRR  | RRR |

| Type | Good                                                                                                                           | Bad |
|------|--------------------------------------------------------------------------------------------------------------------------------|-----|
| S    | SSS                                                                                                                            | SSS |
| T    | TT                                                                                                                             | TTT |
| U    | UU                                                                                                                             | UUU |
| V    | VV                                                                                                                             | VVV |
| W    | WW                                                                                                                             | WWW |
| X    | X                                                                                                                              | XXX |
| Y    | YY                                                                                                                             | YYY |
| Z    | ZZ                                                                                                                             | ZZZ |
| I    | Generally, most cartoonists put serifs on the letter 'I' when it is a personal pronoun and omit them when it is part of a word |     |



## Letter spacing and word spacing

After you have learned to form cartoon balloon letters, it is important to space them properly. There are just three things to think about when spacing your lettering:

1. The space between the individual letters.
2. The space between words.
3. The space between lines of lettering.

The spacing between letters varies because of the different basic shapes of the individual letters. Fitting them together pleasingly is a matter of judgment developed by practice.

The spacing between words should be enough to allow each word to be read separately and clearly as a *unit*.

Between lines of balloon lettering, allow a space of about  $\frac{2}{3}$  the height of the letters to keep the lines of lettering distinctly apart and easily legible.

THIS IS THE WRONG WAY

Rule pencil guide lines and keep your letters all the same height for ease of reading—stick to your guide lines!

THIS IS THE RIGHT WAY

### Letter spacing (enlarged)

RE A D Y

Because of bad spacing, these five letters are not easily read as one word

READY

The same five letters pulled together form a word unit that is easy to read

### Practice spacing letters this size

READY READY READY READY READY READY READY

### Word spacing (enlarged)

READYTOEAT

These ten letters are well spaced as *letters* — but they mean nothing

READY TO EAT

The same ten letters with clear space between word units form an easy-to-read phrase

### Practice spacing words this size

READY TO EAT READY TO EAT READY TO EAT

#### Check your lettering this way:

Here is a bad piece of lettering. Not only are the letters badly formed — in addition it breaks the three basic rules of having proper spacing between 1. Letters; 2 Word units and 3. Lines. Now see how we improve it, step-by-step

WHAT IS GOOD  
LETTERING?

WHAT IS GOOD  
LETTERING?

1. Here the letter forms are improved and on guide lines — but all spacing is bad.

WHAT IS GOOD  
LETTERING?

2. The spacing of individual letters is good, but the words and lines run together.

WHAT IS GOOD  
LETTERING?

3. Here the letters and word units are well spaced but the lines of lettering are too close.

THIS IS GOOD  
LETTERING!

4. Now the letter forms and spacings of letters, word units and lines all help clear, easy reading



## Procedure and practice

After you are familiar with the strokes and letter forms, you should practice by forming actual words and sentences. This is to train your hand to the forms and spacing of lettering at the same time. Set various limits of width and shape for your practice: when you letter a feature no two panels ever have the same space for balloons

ABCDEFGHI  
JKLMNOPQ  
RSTUVWXY  
Z !! ?? 1234

Wrong

When practicing balloon lettering, don't just letter the alphabet — practice lettering and spacing actual words in your balloons

PRACTISE  
LETTERING WORDS  
IN BALLOONS!

Right

First pencil words  
lightly on guide  
lines

THE WORD UNIT  
IS THE IMPORTANT  
THING!!

Now ink lettering. Remember the roughly penciled lettering is only there for a rough guide. In small balloon lettering you must learn to improve the pencil letter forms and spacing as you ink. Erase when finished

For balloon outline use  
brush or flexible pen

THE WORD UNIT  
IS THE IMPORTANT  
THING!!

THE IM-  
PORTANT THING  
IS TO  
USE THE  
PROPER SPACING!

Wrong

Whenever possible, try to give balance and design to your balloons. Avoid weird shapes and splitting words—they will distract the reader's eye

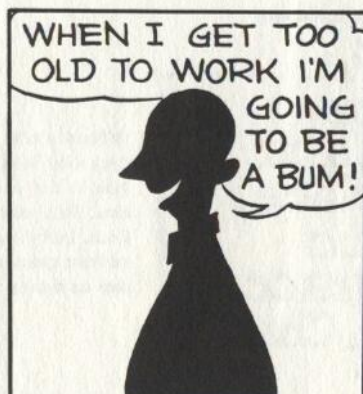
THE IMPORTANT  
THING IS TO USE THE  
PROPER SPACING!

Right

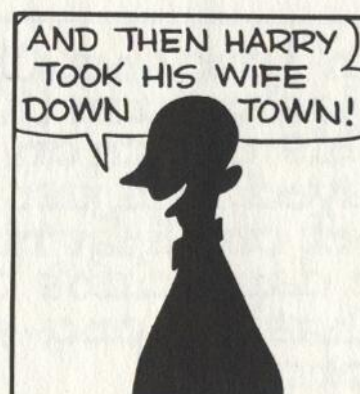
## Balloons in panels



Don't squeeze your balloon outline up over heads in tight places



Do break outline—leave as much space as possible between head and letters



Don't split lettering like this—it makes your story hard to read



Do arrange it so your words follow each other without a break



Don't let your lettering dribble in small bits all over the panel



Do keep letters same height, but compress the width as you space them



Don't squeeze lettering into corners or put balloon outline too close when you have room



Do use your space to allow air around lettering—it's easier to read

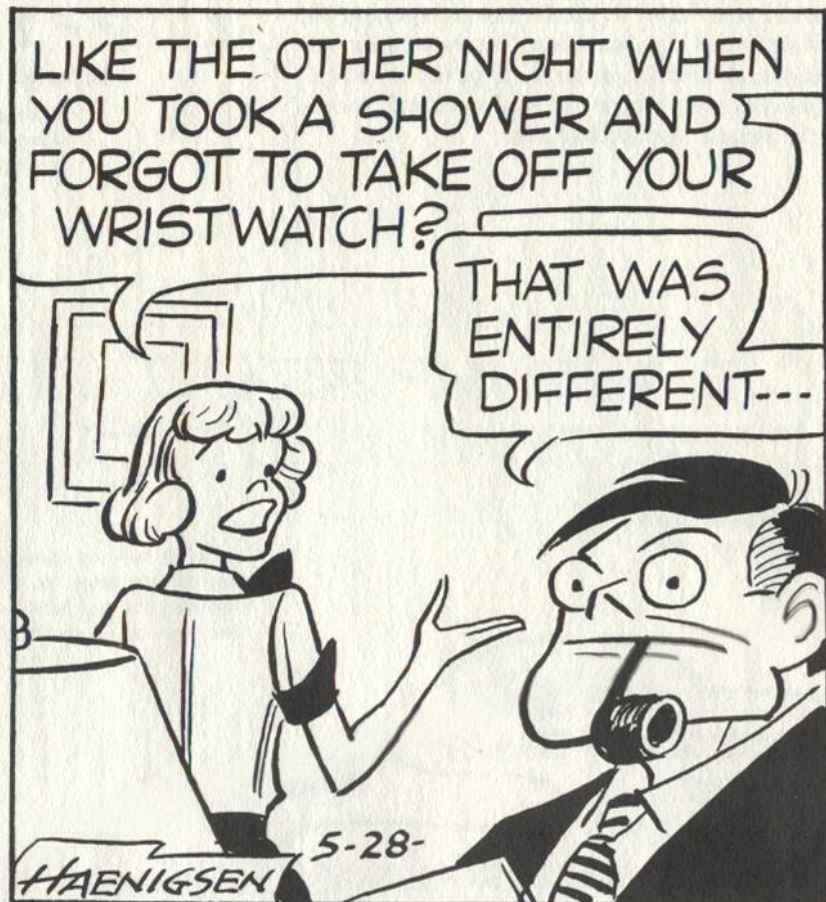


## Balloon letter in use

Here are examples of good, easy to read lettering by four cartoonists. In each of them the letters are well formed and spaced. The words are designed as units and the spacing between lines is good. They are easy to read when reduced and printed on rough newsprint paper. The styles, of course, differ, because each has been developed over years to fit naturally with a

particular style of drawing. Rube Goldberg's political cartoon was drawn about four times the size you see it here. In addition to the powerful letters "UN," the one word "Russia" stands out clear as a bell even after being so greatly reduced. *Think* about reduction when you do your balloon lettering.

Remember that the lettering as well as the drawing is reduced. Harry Haenigsen draws and letters for a fifty per cent reduction—see how clear the lettering remains in the small size. This lettering was done with a No. 170 pen



Reproduced same size as original drawing

⑦  
"We're chasin' Long-shot Charlie,  
He can't look you in th' face.  
For he put his deuce on Phalanx;  
An' he played him just to place.  
The bum bet on th' fav'rite, to  
Th' whole damn club's disgrace.  
O, we're chasin' Long-shot Charlie  
In th' mornin'!"

Willard Mullin did the main lettering of this parody in thick and thin, upper and lower case Roman lettering to give it the look of a printed page of traditional literature. This was done with a 290 Gillott. The balloon of Chas. looks just like what he intended it for—an informal cartoon grace-note to the over-all idea. This is shown same size as drawn and lettered







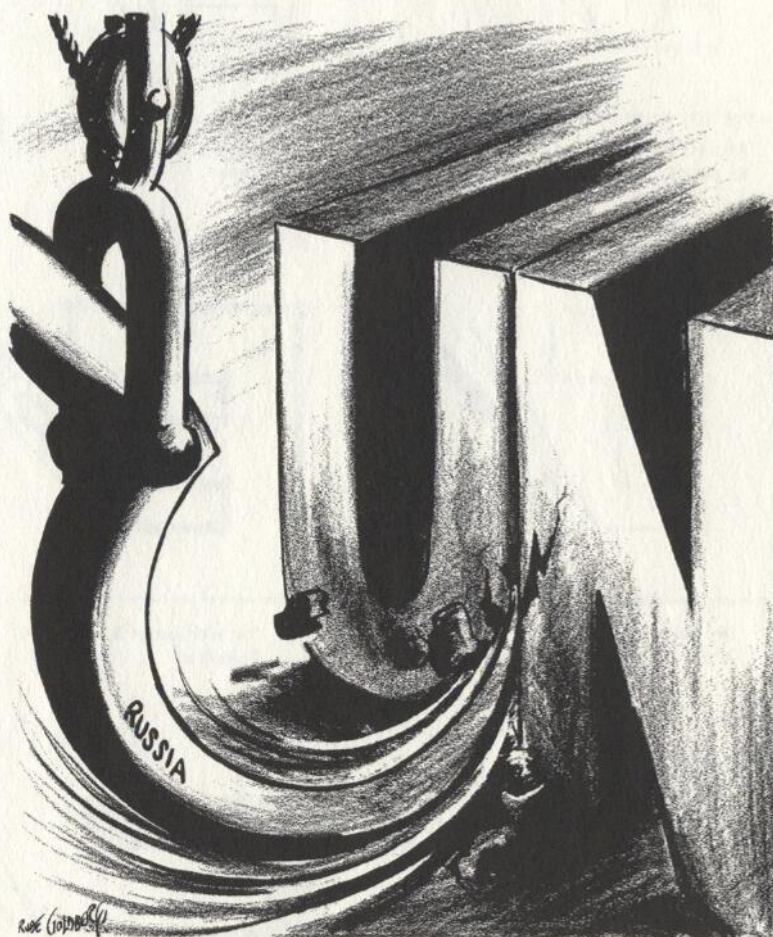
The narrative adventure strip demands clear, easy-to-read lettering. Milton Caniff's guide lines leave plenty of space — about  $\frac{1}{2}$  letter height — between the lines. Plenty of air between the lettering and the balloon outline also helps readability. The thought balloon above the last figure (right) took the form of the green-eyed dragon of jealousy. This was the last panel of a Sunday page, colored, and left the reader with a vivid idea

Reproduced same size as original drawing



Al Capp's interpolations of "Smack!" "Drool!" etc. are distinctly part of his individual style of getting an idea across to his readers. Notice that these words are done with "dancing" letters which are not ruled by the guide lines. The jagged outline of Mammy's balloon gives a crackling, explosive quality to the heavy letters

### Wrecking Machine



Rube Goldberg used these letters as a symbol to get his political idea across clearly. The perspective and shading on the letters makes them solidly three-dimensional, which adds to the power of the drawing



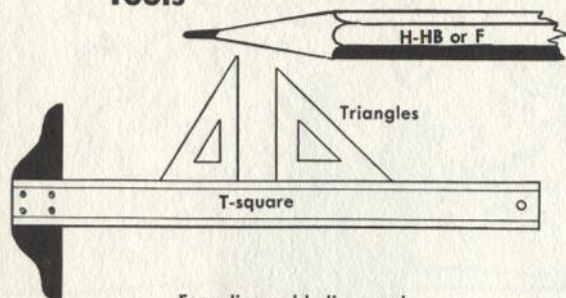
## Display lettering

For the purposes of this course, any style of lettering that is not balloon lettering we call display lettering. This includes letters drawn in outline and then filled in, and single stroke letters done with a large speedball pen or brush. For instance, if your cartoon included a bank or grocery store window, the lettering on it probably would be display lettering and done in a suit-

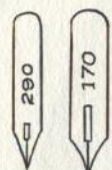
able style to make the drawing look authentic.

For large display single stroke letters your practice exercises are the same as we showed you for balloon lettering, but done in a larger size. Practice until your hand can swing the strokes easily and surely in the larger size. On later pages we give you type alphabets to use for models in practicing display lettering.

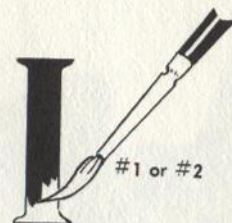
### Tools



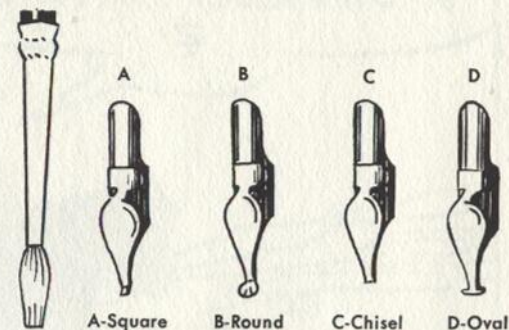
For ruling guide lines and laying out letters



Gillott  
For outlining letters



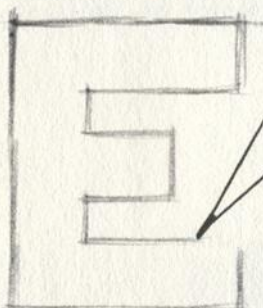
#1 or #2  
For filling in outlined letters



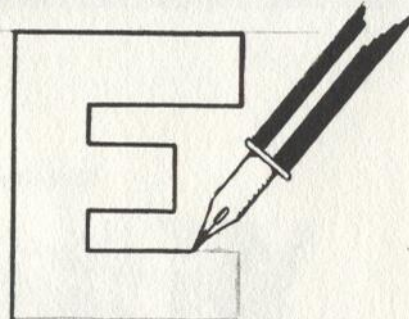
Flat lettering brush and speedball pens for single stroke and heavy outline letters

### Procedure

#### Built-up solid letters



Lay out letter in pencil



Ink letter outline

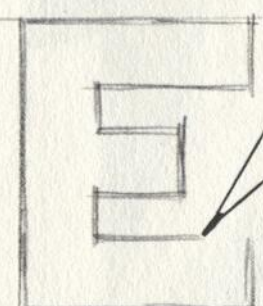


Fill in inked letter outline



Erase pencil and correct with China white if necessary

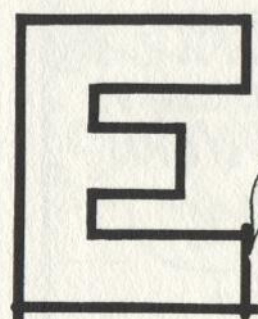
#### Built-up outline letters



Lay out letter in pencil



Ink with Series B Speedball

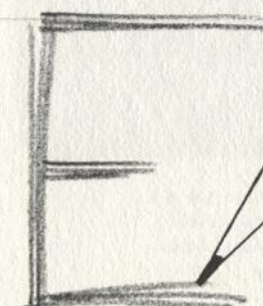


Square corners with white



Outline letters gain impact with shadow

#### Single stroke letters



Roughly pencil in letter



Ink letter with single stroke of flat brush



Or... Use single strokes of large speedball pen to form letters



Correct mistakes and bad lines with China white



For easy reading the form of your letters is important — but *spacing* is equally important. You have only three kinds of spacing to consider: (1) space between letters, (2) space between words and (3) space between lines.

Spaces between individual letters vary. The basic forms of some letters fit together almost like a jigsaw puzzle, while some letters that oppose a curved side to a straight side have to be pulled together to kill white space. Only practice can give your eye the ability to space all letters pleasingly.

For the spaces between words, remember that your reader's

eye tends to read words as units: keep them well separated. If your words run too close together on the line, they blur together in the reader's eye and are hard to read.

Between lines of lettering, a space of about  $\frac{2}{3}$  the height of the letter makes a good, legible separation.

There can be no absolute, iron-clad rules about space to be left between letters and words. It is a matter of your own good optical judgment which only practice will develop. The illustrations will give you an idea of the importance of optical, as opposed to mechanical spacing.

## Wrong — Mechanical spacing

**SPACE WARNING**

This is spaced mechanically — all the spaces between letters are the same, as shown by the gray strips

## Right — Optical spacing

**SPACE WARNING**

The gray strips are the same width as above, but see how we have changed it by bringing some letters into the gray and leaving more space between others to make it look better

The space left between letters is a matter of optical judgment. Because of differences in overall width of line and the shapes of the letters there can be no hard and fast rules about the distance to be left between letters. Correct spacing is the result of instinct developed by practice

**W A**

Wrong

**WA**

Right

Some letters like W and A fit together neatly like a jigsaw puzzle. Other examples: R and Q, T and G

**A R AR**

Wrong

Right

To kill excess white space, push bottom of slant letter A toward upright of R

**AC AC**

Wrong

Right

Push slanted A under curve of letter C

**P A PA**

Wrong

Right

Shove the letter P close to the letter A to take care of excess white space

**IN IN**

Wrong

Right

Get air between the straight letters

**NG NG**

Wrong

Right

Take up space between straight N and curve of G

**SPACE WARNING**  
**SPACE WARNING**

Wrong

Right

Be sure to keep enough space between the words



### Using type faces for models

When choosing a model alphabet to copy, get the best. For display lettering, actual printing type faces are the best models to use. Ever since type was invented, craftsmen have been refining the proportions and relations of each individual letter to the other letters of each type face. Their aim has been to make letters easier to read when made into words. When you copy these letters, you are getting the benefit of all this careful study and improvement in legibility.

Remember that the master letters for each type face were originally drawings — made by the hands of master artists. Today we still imitate the forms and styles of the past, even though we use new tools to shape our letters.

Space does not permit us to show you all the type alphabets now in use. For those students who wish to go deeper into this large subject of lettering, there are good, inexpensive books available at all art supply stores.

#### Gothic

Rr

Capital Lower case

The Gothic styles are sans-serif with all strokes of the same weight. These letters are good for heavy balloon lettering, posters and show cards. There are many type faces in this style including the "Franklin" and "Alternate" Gothics. Below we give you an entire Futura alphabet

#### Futura

#### Franklin

#### Alternate

ABCDEFGHIJKLMNOPQRSTUVWXYZ

NOPQRSTUVWXYZ

YZ&

abcdefghijklmnop

qrstuvwxyz

1234567890\$



Ink with Series B Speedball



Square off corners with white



**Roman**

**Rr**  
Capital Lower case

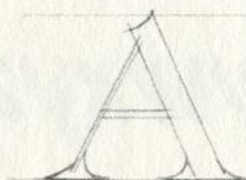
The Roman styles developed from the proportions and weights of the ancient, stone-carved letters of "classic" Rome. The graceful thicks and thins make it a little more decorative for special cartoon uses. Roman types are mostly used in printing books, magazines and newspapers. Below you see the Caslon alphabet

Caslon

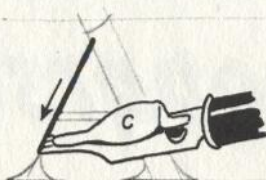
**Bodoni**

Century

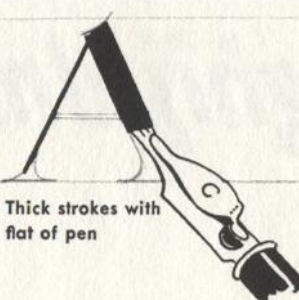
A B C D E F G H I J  
K L M N O P Q R S  
T U V W X Y Z &  
a b c d e f g h i j k l m n  
o p q r s t u v w x y z  
1 2 3 4 5 6 7 8 9 0 \$



Pencil complete letter



Ink thin strokes of letter with side of pen



Thick strokes with flat of pen



Outline and ink serifs with #170 pen



Square corners with white



## Type alphabets

Here are some type alphabets for practice and reference. There are many more and we repeat: a type specimen book is a very handy item in your morgue. Everything, including lettering, that adds to the authenticity of a cartoon helps. Get the habit of noticing the kinds of letters that are used on store fronts, monuments, traffic signs and so on. Use the right style in the right place when your idea calls for display lettering.

**A B C D E F G H I J K L M N O P Q R**  
**S T U V W X Y Z 1 2 3 4 5 6 7 8 9 0 \$**

Beton Open

**A B C D E F G H I J K L M N O P Q R S T U V W**  
**X Y Z a b c d e f g h i j k l m n o p q r s t u v w x y z**

Othello

**A B C D E F G H I J K L M N O P Q R S T U V W X**  
**Y Z 1 2 3 4 5 6 7 8 9 0 \$**

Shadow

Pencil complete  
 letter — ink  
 shadow only

**A B C D E F G H I J K L M N O P Q R S T U V W X**  
**Y Z a b c d e f g h i j k l m n o p q r s t u v w x y z 1 2 3 4 5 6 7 8 9 0 \$**

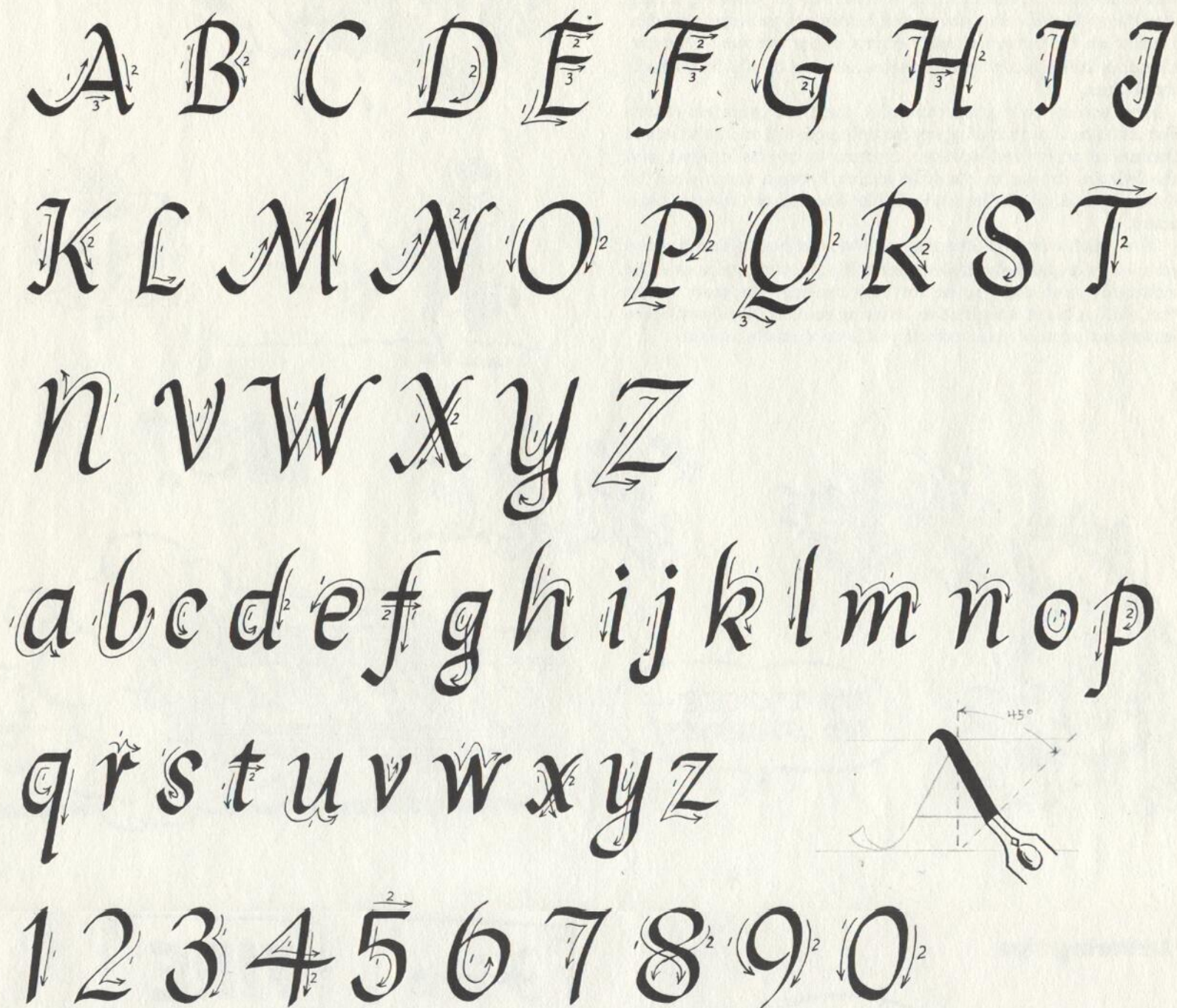
Old English

**A B C D E F G H I J K L M N O P Q R S T U V W X**  
**Y Z a b c d e f g h i j k l m n o p q r s t u v w x y z**

Flash



## A useful script alphabet



You will often be commissioned to do jobs that call for display lettering as well as cartoons. For such jobs you will find it useful to master an alphabet like the one on this page. It is easily read and easily lettered.

The first step is to rule three light pencil lines. The bottom line is the one on which all letters rest, the middle one determines the height of the small or lower case letters, and the top one the height of the capitals. The tall part of the letters b, d, f, h, k, and l are called ascenders and are generally drawn a little taller than the capital letters. In the alphabet shown, the lower case letters are five times as high as the thickness of the nib of the lettering pen and the capitals are eight nibs high.

Lightly pencil in the letters, then ink them in with a flat nibbed lettering pen and black ink. These letters were drawn with a Hunt pen #2 the same size as reproduced. By using a wider or thinner pen the letters can be made heavier or lighter. Hunt pens come in sizes ranging from #1, the heaviest, to #6,

the lightest. Speedball pens series C and lettering brushes can also be used in the same way. By using different size pens or brushes and drawing the guide lines different distances apart, you can create a great variety of sizes and weights to fit almost any kind of job.

There are two kinds of alphabets. One is "italics," the alphabet you see here. The other, called "roman," is straight up and down. To help you slant all your italic letters at the same angle, draw light pencil guide lines about one-quarter inch apart up and down on your paper with a T-square at the angle you want. Do not slant the letters too much or they will be hard to read.

The secret of drawing this alphabet is always to hold the pen at an angle of 45 degrees as shown in the drawing. As you draw the letters, the pen automatically makes the thick and thin strokes. After you have mastered this alphabet, experiment with variations of these letter forms until you can find one that suits your needs.

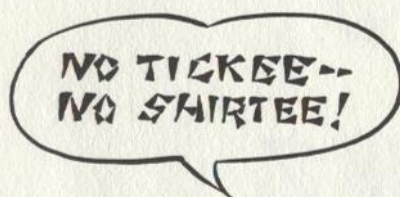


## Gimmick Lettering

In a true cartoon, the lettering is a part of the drawing, fitting into the style and composition and helping to put over the idea. Letters can be formed of every object under the sun — the cartoonist is limited only by his imagination and his ability to make them clear.

Here you see only a few examples, there are countless others. For instance, if a quavering cry for help goes up, make the letters themselves waver and wobble. Icy remarks can be lettered, and the balloon drawn, to resemble icicles. Foreign accents can be shown by making the letters look like Russian or Oriental characters.

Too much screwball lettering can become boring and hard to read — use it sparingly. Balloon lettering in comic strips must be uniformly neat and precise for easy reading: the story comes first. Still, a bit of imaginative lettering can add a real wallop to important parts of your story if you keep it easily legible.



## Lettering tips



Single stroke brush letters give action to single heavy words in a balloon



For heavy, emphasized words in balloons use a speedball B-3 or B-4

Wrong



Right



When shading on or behind letters, remember to make the contrast clear. Remember — if it's hard to read it's no good



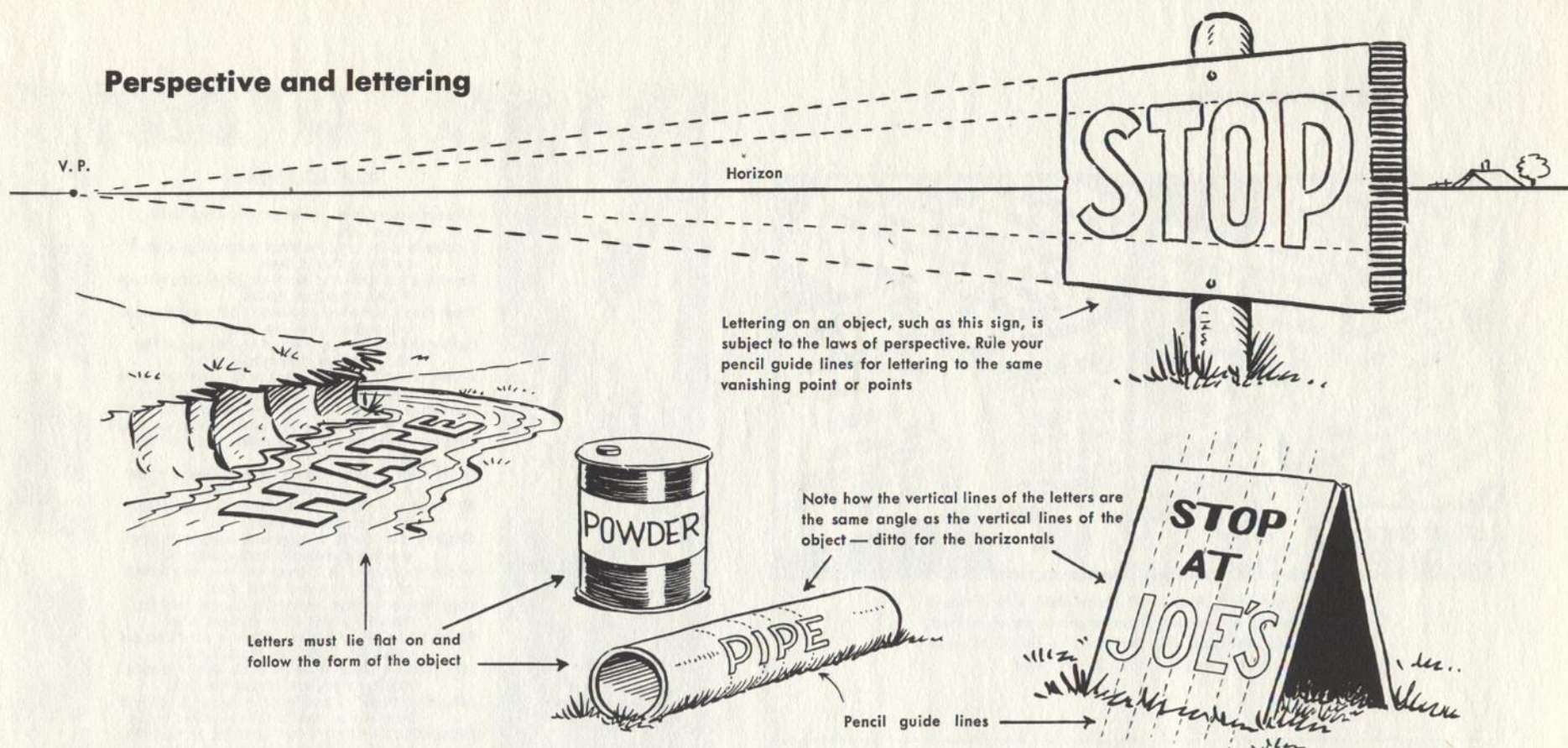
When you letter something like a sign — which is supposed to be easy to read — do it in the right style for the job



When working for color reproduction you can make initial letters stand out by having a form behind them to take color. The letters themselves can also be designed for areas of color



## Perspective and lettering



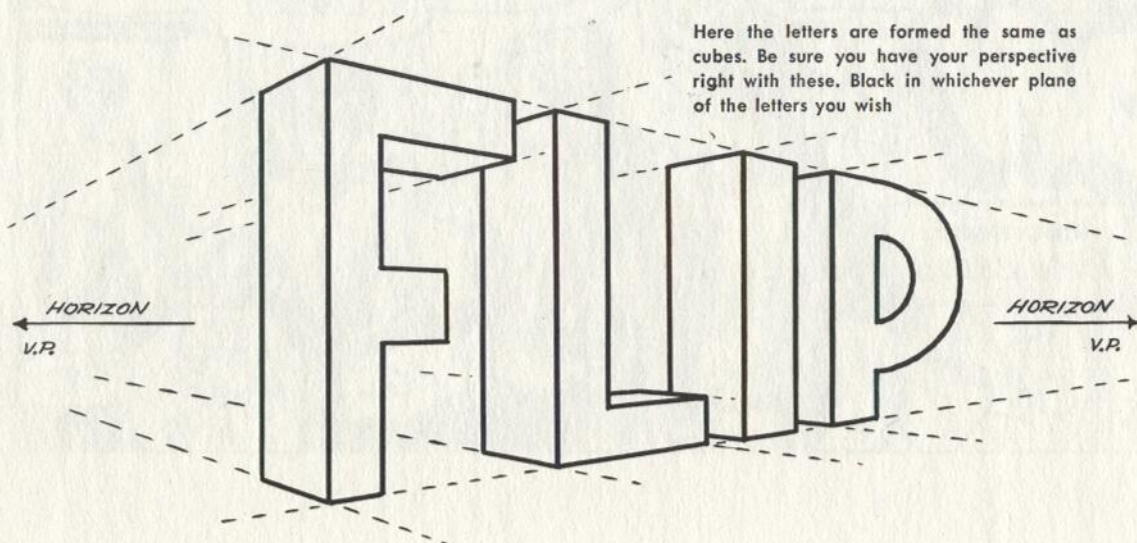
## Shading letters and shadows

**SWISH**

The shading here helps give the feel of the action

**HATE**

To make a letter stand up — treat the shadow as you would with any other object



**TOP**

When shading letters be careful to keep the light source the same on all letters

**TIME**

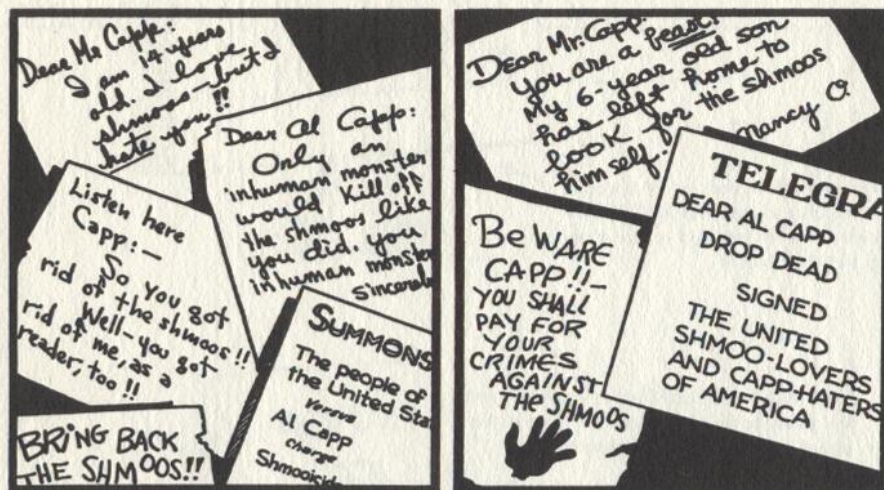
This type of shading is easy to do if you think of the shadow as being the same as the letter but shifted over

**TREE**

Here the shadow is at an angle from the letter, tapering down to the bottom



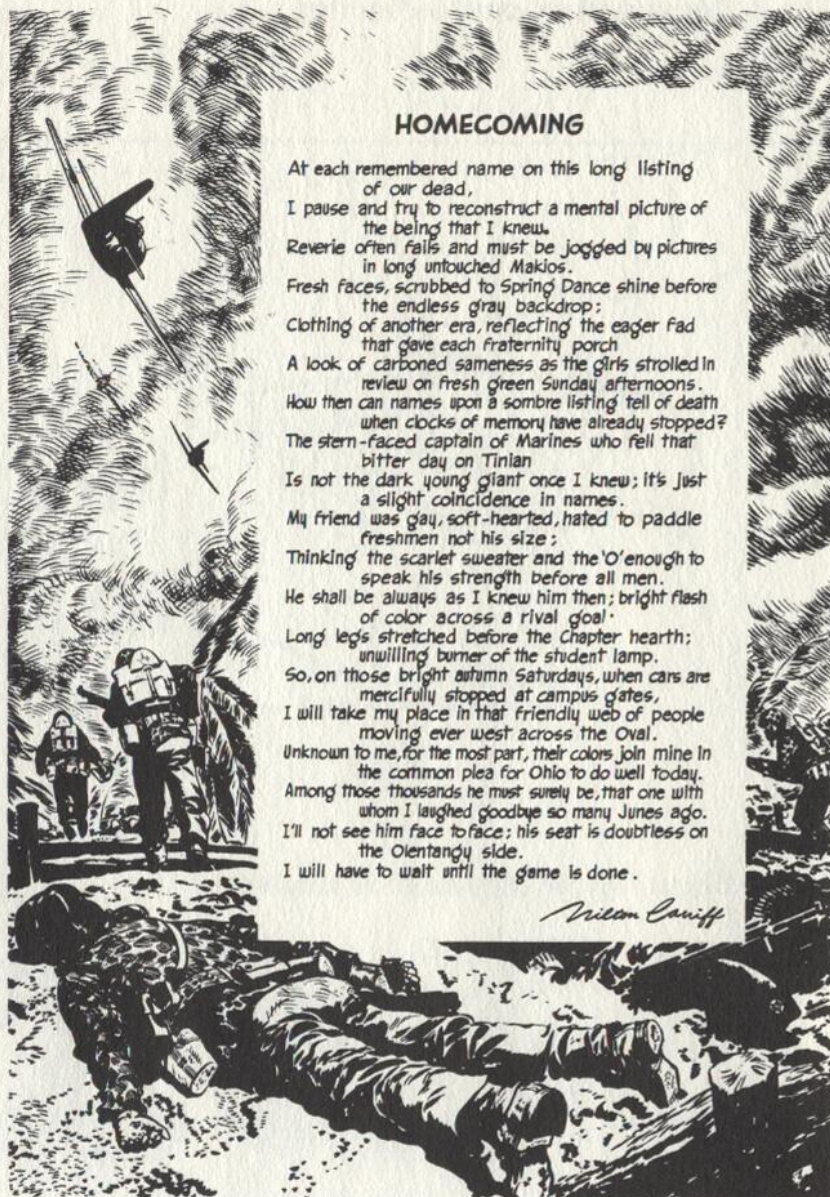
## Special lettering



In these two panels from a Li'l Abner daily strip Al Capp uses a variety of lettering styles to create visual interest. When using longhand script lettering, be careful to make sure that it will be legible after it is reduced



The name of the feature is usually hand-lettered in its creator's distinctive style with a large signature in the first panel of a Sunday comic page



## HOMECOMING

At each remembered name on this long listing of our dead, I pause and try to reconstruct a mental picture of the being that I knew. Reverie often fails and must be jogged by pictures in long untouched Makios. Fresh faces, scrubbed to Spring Dance shine before the endless gray backdrop; clothing of another era, reflecting the eager fad that gave each fraternity porch. A look of carboned sameness as the girls strolled in review on fresh green Sunday afternoons. How then can names upon a sombre listing tell of death when clocks of memory have already stopped? The stern-faced captain of Marines who fell that bitter day on Tinian. Is not the dark young giant once I knew; it's just a slight coincidence in names. My friend was gay, soft-hearted, hated to paddle freshmen not his size; thinking the scarlet sweater and the 'O' enough to speak his strength before all men. He shall be always as I knew him then; bright flash of color across a rival goal. Long legs stretched before the Chapter hearth; unwilling burner of the student lamp. So, on those bright autumn Saturdays, when cars are mercifully stopped at campus gates, I will take my place in that friendly web of people moving ever west across the Oval. Unknown to me, for the most part, their colors join mine in the common plea for Ohio to do well today. Among those thousands he must surely be, that one with whom I laughed goodbye so many Junes ago. I'll not see him face to face; his seat is doubtless on the Olenangy side. I will have to wait until the game is done.

Milton Caniff

In this serious drawing on a serious subject for the Ohio State Alumni Magazine Milton Caniff deliberately uses a rather plain upper and lower case alphabet to put the message across simply and with good taste

Knowledge of type is put to work here. Film companies' names set the stage in the first panel of this Sunday page





FAMOUS ARTISTS CARTOON COURSE  
Student Work  
Lesson 18

To study and practice

In this lesson you learn the rules and procedure for doing balloon and display lettering. Good lettering is important for all cartoonists. It is a trademark of the real professional.

Anyone can learn to do good balloon lettering -- all it takes is enough careful practice. Practice by drawing and lettering balloons on bond typewriter paper. Frequently review your lesson and check your lettering for:

1. Form of the letters - page 5
2. Letter spacing - pages 6 and 11
3. Word spacing - page 6
4. Design and placement of balloons - page 7

You have an opportunity to practice and improve your lettering every time you write a letter. Carefully letter the name and address on each piece of mail you send out. Don't just scribble your ideas or captions under your drawings -- letter them with professional care. Poor lettering can spoil an otherwise excellent cartoon.

In criticizing your lettering we are going to consider the forms of your letters, the letter spacing, the word spacing and the shape and logical placement of the balloon.

The assignment you are to mail to the School for criticism

On the reverse side of this sheet is a diagram layout -- for an ad in your local newspaper. Your drawing can be the same size as in this layout (or scaled up if you wish to work larger). Do not draw it smaller in scale. Follow the general layout or, if you feel you have a better approach, create your own. Pages 7, 8 and 9 of the Introduction to the Course show you good examples of advertising layouts containing cartoons.

Your local hardware dealer wants a cartoon with hand-lettered copy to run as a two-column newspaper advertisement for his store. His message is simple -- "Clean up, paint up, fix up" -- and to get it across to possible customers he wants a cartoon which will illustrate this theme in a humorous, interesting and attention-getting manner. In the layout for this ad, A represents the general area the cartoon is to occupy, together with the balloon and dialogue spoken by the cartoon character. The words in the balloon should read "\_\_\_\_\_ (name of store) has everything you need." B represents the space in which you are to letter the following copy: "CLEAN UP -- PAINT UP -- FIX UP," and space C is for the name and address of the firm, real or invented, which you are to letter also.

Your ad should be drawn on an 11 x 14-inch sheet of drawing paper in ink, using either brush or pen.

Present your assignment in the same clean, professional manner you would use if you were submitting it to the cartoon buyer of a publication. Letter your name, address and student number carefully in the lower left-hand corner of the page. In the lower right corner, place the Lesson Number. Mail to:

FAMOUS ARTISTS CARTOON COURSE  
Westport, Connecticut

(over)



To study and practice

In this lesson you learn the rules and procedure for doing balloon and display lettering. Good lettering is important for all cartoonists. It is a trademark of the real professional.

Anyone can learn to do good balloon lettering -- all it takes is enough careful practice. Practice by drawing and lettering balloons on bond typewriter paper. Frequently review your lesson and check your lettering for:

Balloon lettering

Cartoon

Headline

Name and address of firm

A

B

C

CLEAN UP!  
PAINT UP!  
FIX UP!



# 8

## **Color—the theory and practice of painting**

Famous Artists Course in Commercial Art,  
Illustration and Design

### Guiding Faculty

Albert Dorne, Founder  
[1904-1965]

Norman Rockwell

Al Parker

Ben Stahl

Stevan Dohanos

Jon Whitcomb

Robert Fawcett

Peter Helck

Austin Briggs

Harold Von Schmidt

George Giusti

Fred Ludekens

Bernard Fuchs

Bob Peak

Tom Allen

Lorraine Fox

Franklin McMahon





### The color wheel

All the colors in this "wheel" are made from red, yellow and blue paint, out of tubes. These are called the *primary* pigment hues. Mixing yellow and blue together produces green. Blue mixed with red makes violet. Orange is made from a mixture of yellow and red. These three, green, violet and orange, are called the *secondary* colors. If we mix adjacent primaries and secondaries, we produce six other colors, which are called *intermediates*: yellow-green, blue-green, blue-violet, red-violet, red-orange and yellow-orange.



## An introduction to color

Every artist who uses color should have a clear understanding of what color is, how to organize it, and how to employ it to best advantage.

Color is a sensation we experience when our eyes are struck by light waves of varying lengths. We see objects because nature has given us a very sensitive and complex receiving system in the form of our eyes, nervous system, and brain. Our eyes pick up light waves and translate them into a sensation of sight, just as our ears pick up sound waves and translate them into a sensation of sound.

In order for us to see anything, there must be light. The rays of light which come to us from the sun we call white light. Yet, strange as it may seem, this white light contains all the colors that we see around us. This is demonstrated when you see a rainbow during a summer shower, or shine a ray of white light through a triangular piece of glass, called a prism. Sir Isaac Newton, in 1667, first discovered how pure white light could be divided into different groups of color waves by using the prism in this way.

All colored objects contain pigment which has the ability to soak up certain rays of color, while reflecting others. The pigment in the skin of a red apple, for instance, reflects only the red rays and absorbs all the others. A green apple, on the other hand, reflects only the green rays to our eyes while absorbing the others.

Some materials are especially rich in pigment. These materials are carefully selected and purified into the paints you buy at your local art store. They have been manufactured from various plants, animals and minerals. When you mix these pigments, you are mixing pure color. In other words, you are working with purified pigments which have the special property of reflecting the particular colored waves you want to see, while absorbing all the others. From now on, unless otherwise noted, all our color discussion will be in terms of pigment, and not of light.

Color is a highly personal and variable element. There are, however, certain basic principles in the handling of color which you must master. The material presented in these pages will explain these principles. Your ultimate development as a colorist, of course, will depend to a large extent upon your own imagination, ingenuity and taste.

Most people describe color in a vague, general way. They use such terms as "baby blue," "apple green," "grass green," "canary yellow," "coral," "peach," "rust," etc. Any person who works professionally with color, however, whether he uses it in making paintings or for some other purpose, must be more precise. He is faced with the problem of using and controlling hundreds of different colors.

Scientists prepared the way for the development of logical color systems. As long ago as 1866, a scientist named Helmholtz discovered that every color has three different characteristics or dimensions: hue, value and intensity. He neglected to work out a practical system for applying his theory, so it had little influence on art until much later. Around the turn of the century, Albert H. Munsell, an instructor in art, realized that everyone who wants to use color correctly must recognize and understand these color characteristics. Beginning with this theory as a starting point, he developed a complete system for the analysis and organization of color. Today the Munsell system is widely used throughout the world.

To work with color, it is not necessary for you to study or memorize complicated systems of numbers and letters. As a practicing artist, you are most concerned now with learning how to recognize, judge and control differences in the three dimensions of every color: *hue*, *value* and *intensity*.

The following pages will give you the information you need in order to do this. If you master this material, you will be able to judge and describe any color accurately. You will also know how to mix two or more colors together to make exactly the color you want. Finally, you will learn how to combine different colors in pleasing and effective compositions.

It is important to remember, however, that learning to understand and use color results not from reading about how it is done, but by actual practice of eye and hand. These pages will give you the information you need, but the most important thing is to apply this information to your own work with color.



## 1. Hue

The word “hue” is used in these lessons to denote the position of a color on the color wheel. It has nothing to do with whether the color is light or dark, strong or weak. Hue, in reality, is the term used to *name* a color. In speaking of people, one says, “What is the *name* of the man?” In art we say, “What is the *hue* of the color?”

Yellow, blue, green, violet, red-orange, and so on, are different *hues*. They lie at different points on the wheel. In the same way, we can distinguish variations of hue within a single, basic color. For example, yellow-green and yellow-orange.

The closer together hues are located on the color wheel, the more related and harmonious they are, because each color contains some of the color lying next to it. On the other hand, hues which are separated from each other are more distantly related. Colors which are opposite each other across the wheel have absolutely nothing in common. They form the strongest contrast possible, and create a neutral gray when mixed together.

### Warm and cool colors

When artists speak of “warm” and “cool” colors, they are again discussing the qualities of hue, rather than of value and intensity. If you will divide the color wheel in half by an imaginary line between yellow and yellow-green at the top, and between red-violet and violet at the bottom, you will see that the hues in the left half of the wheel, centering around orange, appear *warm*; whereas those on the right, centering around blue, appear *cool*.

This reference to colors as warm or cool results from association. The words actually describe the physical sensation we feel when we are surrounded by large masses of these colors. In a room with blue walls, for example, we tend to feel cool. In a room decorated with yellow, hot reds or oranges, we feel warm. There is a good reason for this physical reaction to color. From our daily experiences we associate yellow, orange, or red with fire. Thus, they mean *heat*. Cold, deep water is bluish or greenish. A starlit winter sky is blue. Ice has casts of green and blue. These associations account for our various emotional reactions to the temperature quality of all hues. We have more to say

about the psychological effects of color, later on in the text.

The colors halfway between these warm and cool extremes, such as yellow-green and red-violet, are fairly neutral; they seem neither very warm nor very cool. The warm and cool qualities of color at these points are very subtle. Seeing a green hue which is fairly close to yellow, we sense that it tends to be warm as compared with a green further around the wheel, toward blue. Thus we speak of a “warm green” and a “cool green.”

We can extend this distinction throughout all the hues of the color wheel. For instance, consider red or violet. If the red leans toward the orange, it is a warm red because yellow has been added. If it contains more blue, it is a cool red. Similarly, if a violet leans toward the red, it is a warm violet. If it contains more blue, it is a cool violet.

*In the main, any hue is warmed by the addition of yellow, and cooled by the addition of blue.*

Theoretically, neither white, black, nor any neutral grays mixed from white and black, are colors. They lack two of the essential color dimensions, hue and intensity. However, they are both very useful for modifying the values and intensities of the colored pigments. Of the blacks, ivory black is considered warmer than lamp black, flake white warmer than zinc white.

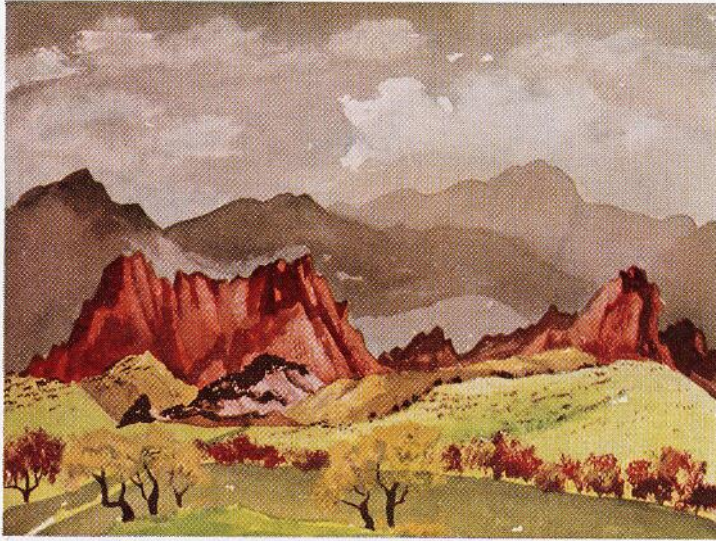
It is not enough simply to understand the principles of the color wheel, and warm and cool color. You must be able to recognize them in nature, and in paintings. From now on, make it a habit to know the colors that you see around you, in clothing, cars, buildings, etc. As an artist, you cannot settle for the general color description of red, yellow, or blue. You must learn to recognize several different reds that range from cool, violet-red, to warm, red-orange. Certain painting subjects call for a warm color scheme, others require cool hues throughout. You may even combine both warm and cool hues in a single painting, if the problem calls for such striking contrasts. It all depends upon the ultimate effect that the artist has in mind. The important point is to *control* the warmth or coolness of the hues.

Later you will see how this knowledge will help you to paint a still life and portrait, and create the effect of sunlight and shadow in a landscape.

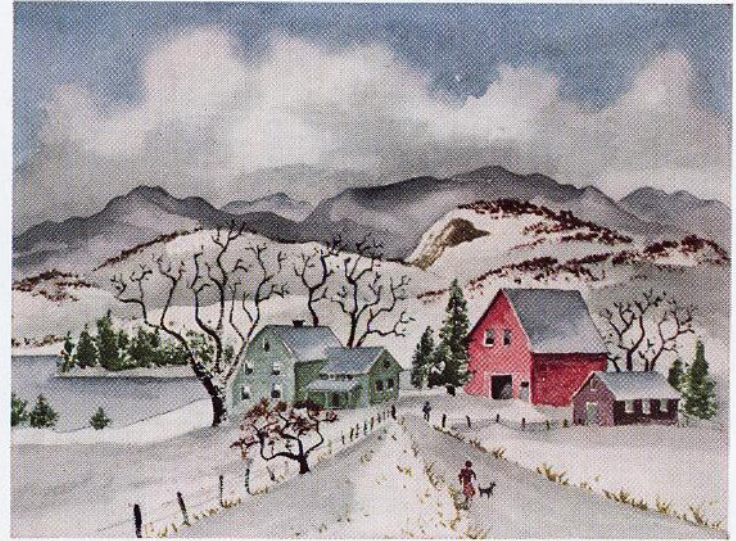




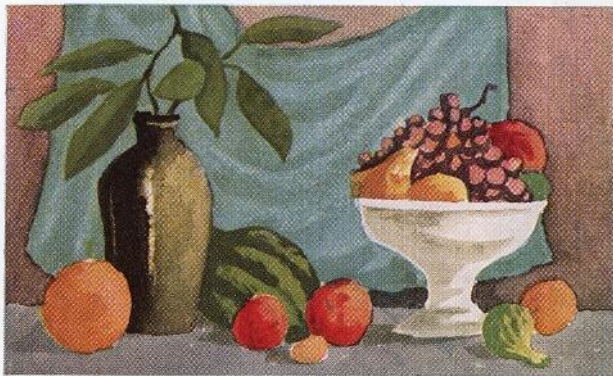
These three apples are different in hue. One is green, one is yellow, and one is red.



This is a warm color scheme. Dominant reds, oranges, and yellows, are appropriate for the sunny desert scene. Compare the warmth of the mountain and sky in this picture, with the cool bluish-grays in the same areas of the painting at the right.

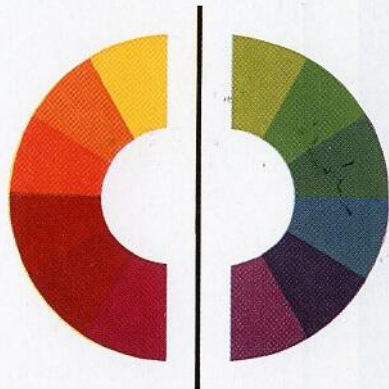


This is a cool color scheme. The colors in a winter landscape should reflect the temperature of the season. The artist here has captured this quality in cool hues of blue, green, and gray blue. Even the red of the barn is a cool red.

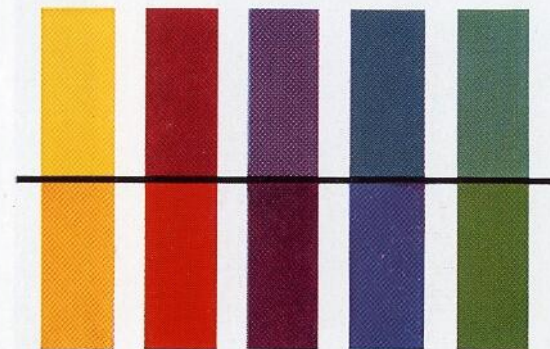


Here is a warm and cool version of the same painting. Both pictures contain the same basic hues, but the hues in the one at the left have been warmed by the addition of red, yellow, or orange to the basic colors. Blue has been added to the

colors in the picture on the right. For example, the background is a dull red-violet at the left, blue-violet at the right. The swatches in the center show the typical warm and cool variations of basic hues. The left column is warm, the right cool.



The hues in the left half of the color wheel are considered warm, those in the right half cool.



Each bar contains a warm and cool variation of the basic color. The upper half is cool, the lower half warm.





These two apples demonstrate what we mean by value. The red apple, at the left, is made up of all three properties of color: hue, value and intensity. The apple at the right is a colorless photograph which contains only values.

## 2. Value

The first dimension of color is hue. The second dimension is *value*. For any artist working in color, *value* is the most important dimension. It is impossible to overemphasize this simple fact. Mistakes made in choice of hue or intensity are far less serious than errors in value. At all costs, learn to keep your values correct! When we use the word "value" we are referring only to *lightness or darkness of a color*. It's that simple.

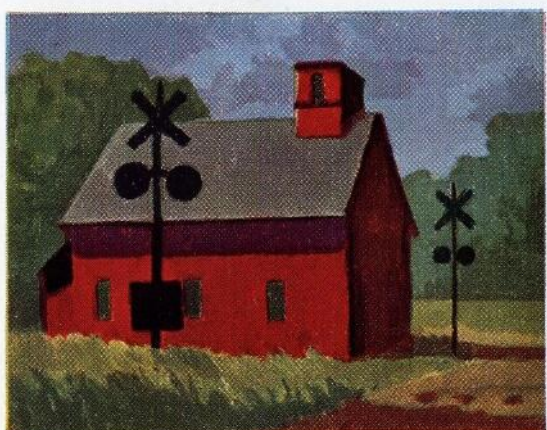
The words *tint* and *shade* refer to the value of a color. To make a tint we add white to a pure color; to make a shade we



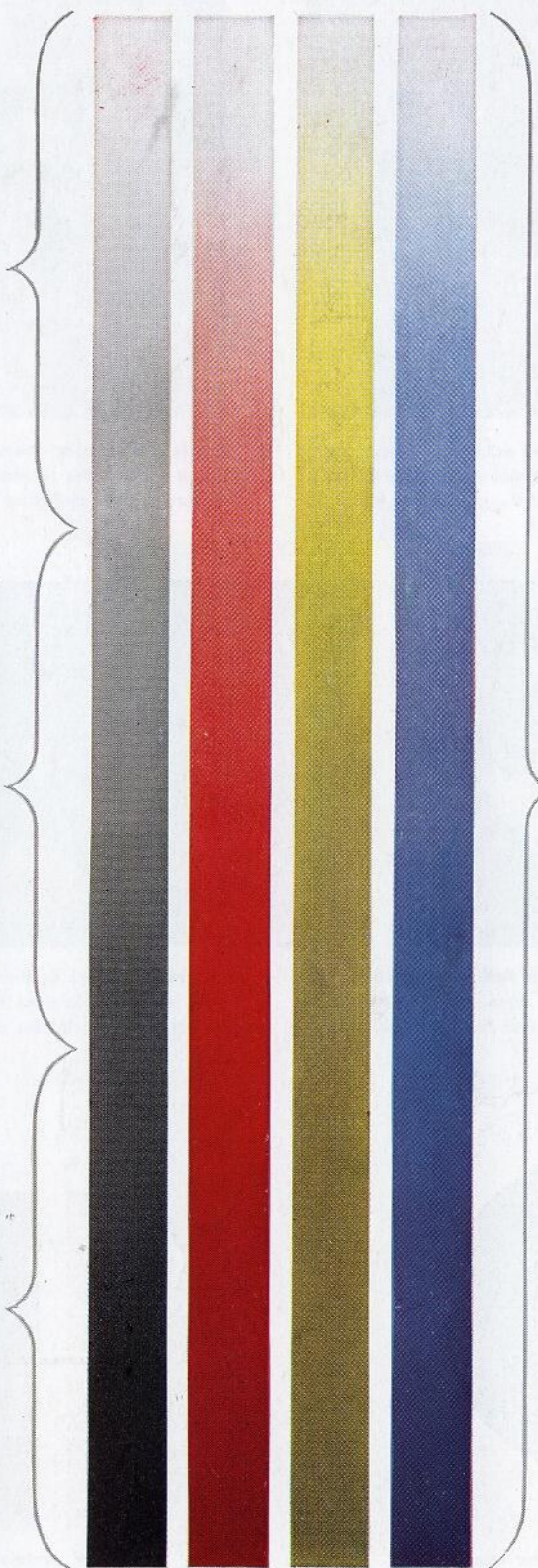
This is a high key painting. A large amount of white has been added to each color. Compare its values with those in the upper third of the columns at the right. This choice of values in a picture creates a delicate, pastel effect.



This picture was painted with a middle range of values, no extremes of dark or light. Because very little white or black was added to the colors, they are more intense than those in the high or low key pictures.



The values in this low key picture come from the bottom third of the column scale on the right. Notice that the light areas, here, are about the same value as the dark areas in the high key picture.



### Value scales

The first scale on the left contains the familiar gradation of grays, ranging from white to black. The second column contains different values of a single red hue. The value gradations in this column match those in the first column. The yellow and blue are arranged in exactly the same way. Squint your eyes, and move them horizontally across any level in this group of scales. You will see that the four strips of gray, red, yellow, and blue are the same in value. The same hue simply becomes darker or lighter. The pure yellow, as it comes from the tube, is near the top of the strip, while the pure red and blue take their place lower in the value scale. On the opposite page, you see a black and white photograph of this value scale, in which all four bars are exactly alike.



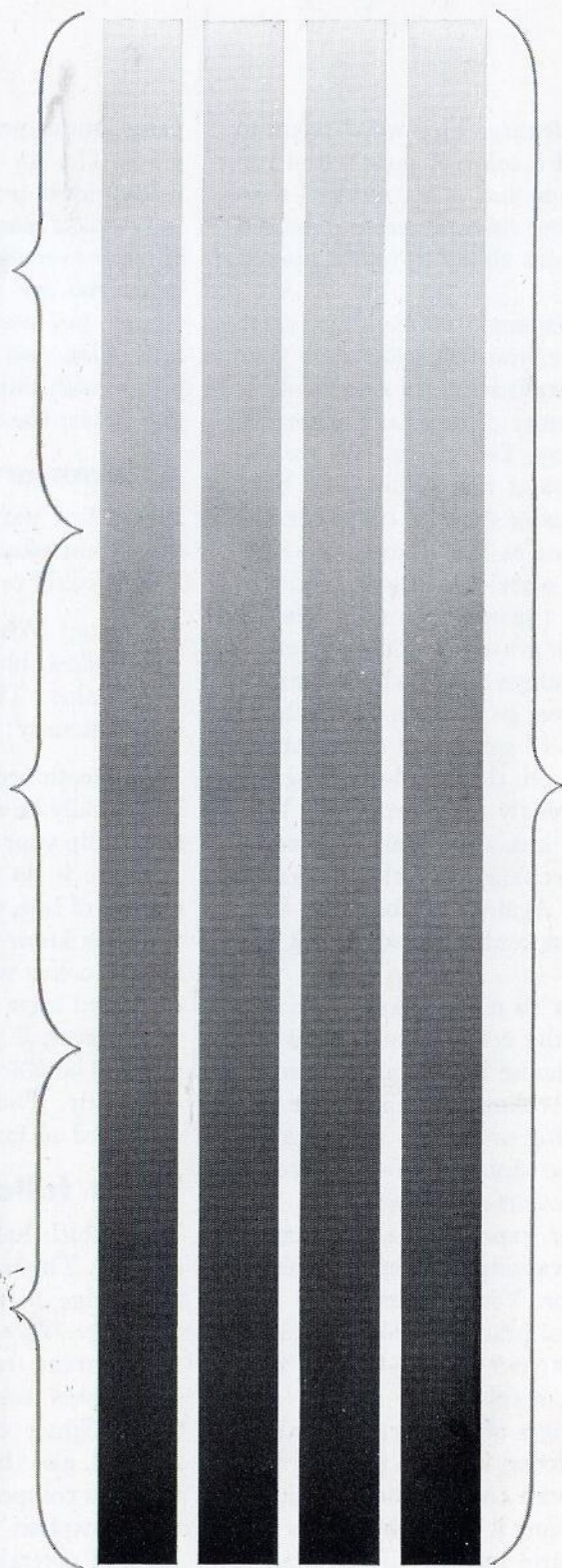
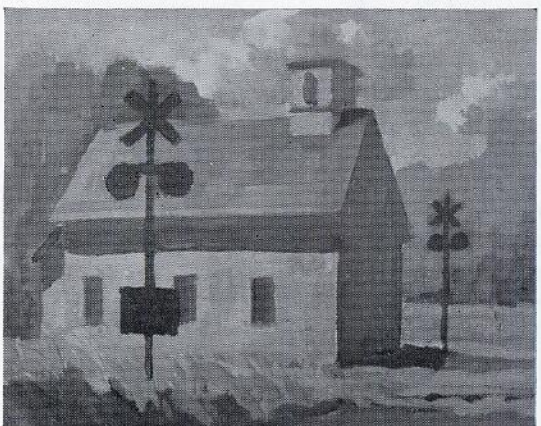
In this picture we have used the full value range from white to black to create maximum contrast and visibility.



add black. In neither case do we change the *hue*—only the value. The chart on the opposite page shows how the value of pure colors from the tube can be changed and controlled by the addition of black and white.

To handle color effectively you must first be able to see and recognize these value differences in your subject, then interpret these differences on your palette. We say interpret, rather than match, because the range of values in nature is much greater than that of your pigments. Black paint is much lighter than a very dark shadow; white paint many times darker than sunlight reflected from a shiny surface.

The artist, looking at his subject, decides which area is the lightest and which is the darkest. Then, he decides how light or dark he will make these extremes in his painting, and relates all the other values to them. The examples on this page show you that the value-spread from light to dark can be limited to a high, middle, or low key, or include the whole range from black to white. The choice depends on the effect you wish to create. The main point to gain from these pages is the *importance of value control*. Once you decide on a value range that seems appropriate for the effect you want, keep it consistent throughout your whole picture.



This page is simply a black and white photograph of the opposite page. It demonstrates the importance of recognizing and controlling different values in your paintings. The pictures are effective, although they contain only values, no hues or intensities.





### 3. Intensity

The third dimension of color is *intensity*. This word refers to the *strength*, *saturation*, or *purity* of a color. A pure red of full intensity gives our eyes the sensation that it is “redder” than when diluted with gray, or some other color. There is more red pigment in the pure red. It has greater ability to reflect the red rays of light.

Most colored pigments are of maximum intensity as they come from the tube. In painting a picture, you will seldom use your colors in this pure state, unless you are striving for a particularly brilliant effect. To reduce the intensity of any pure pigments, you may add black, or white, or gray. Two pages back we discussed the value changes in the bars of red, yellow, and blue. Now turn back to that chart, and notice that the colors become *weaker* in *intensity*, at the same time as they change in value. The intensity of any color on the wheel can also be reduced by mixing it with its *complementary* (its opposite on the wheel). For example, red can be weakened or grayed by adding green.

All around us, we may observe changes of intensity in familiar colored objects. The leaves of the trees go through two cycles of intensity each year. The first leaves of spring are of an intense yellow-green. As the summer wears on, they gradually lose this first brilliance, and become increasingly a grayer-green. With the first frosts of autumn, the same leaves suddenly become intense again. This time their hue also changes and they appear as intense yellows, oranges, and reds. Again, they begin to fade. By mid-winter they turn gray-brown, and are ready to rot into dark gray leaf-mold.

The color in a pair of “blue jeans” is most intense when they are new. With repeated washing, the color becomes dull and faded, less intense. The color of a house is at its maximum intensity when freshly painted. The colors of a landscape lose their intensity when seen through fog or smoke, and regain it in brilliant sunlight. Colors in the distance are reduced in intensity, as compared to the same colors seen close-up.

As part of your practice with color, experiment with changing the intensity of all your colors in varying degrees. Do this on your palette, or on scraps of paper. You’ll be surprised how many different effects your patches of practice strokes will show. This exercise will help you to fix in your mind what you have just read about the third dimension of color.

You will see, in the following pages of this section, that the color in practically every brush stroke in each painting is a different combination of two or more colors. The intensity of each color has been adjusted by mixing it with others. It is particularly important to learn to control intensity if you plan to

paint landscapes, still lifes, or portraits. Nature is full of subtle grays. The sky is not simply a blue from the tube, nor grass a ready-mixed green.

We have discussed the three dimensions of color separately, in order to make each one clear. However, you must realize that when you are actually mixing color as you paint, you rarely change *just one* of its dimensions. In most cases you alter the hue, value, and intensity simultaneously. For example, if we mix yellow with blue-violet, we create a bluish green that is lighter and grayer than the original blue-violet.

#### A summary

In the first part of this section we showed you that color has three dimensions: (1) HUE, (2) VALUE, (3) INTENSITY. Before going on, let’s briefly review these dimensions.

1. Hue: What we commonly call the name of a color. Red, yellow, blue, blue-green, etc., are *hues*.
2. Value: The lightness or darkness of a color.
3. Intensity: The strength or purity of a color.

As mentioned above, when you mix colors for a painting you will usually be changing hues, values and intensities all at once, as you dip your brush from one color to another on your palette.

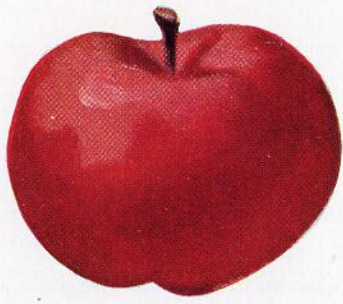
There is no need for you literally to stop and measure the change of hue, value and intensity each time. With practice you will soon know what effect one color has on the other, and mixture of colors will become as familiar and automatic as writing one word after another to create a complete sentence.

However, if you understand and recognize these dimensions, you will be able to create the color effects you want, quickly and effectively. Therefore, be sure you understand what we have explained so far, before proceeding.

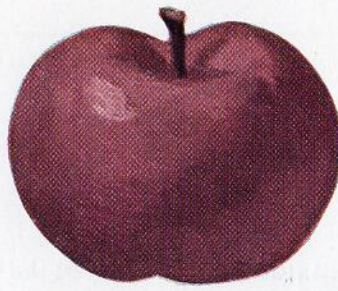
#### What follows

That which has gone before has dealt with the basic structure of color. The text which follows will show you how to apply this knowledge to the actual pigments you mix and use in your painting. We will demonstrate how one color affects another, how certain colors appear to come forward in a picture, and how others recede. We will show how colors change under different light conditions. The emotional effects of color will be covered, also the control of moods, and the use of color proportion in a composition. Following this you will see demonstrations which explain the important steps in painting landscape, still life and portrait.

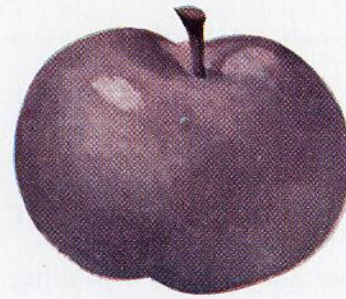




This red apple was painted in full intensity, with pure pigment as it came from the tube.



Here a moderate amount of gray has been added to reduce the intensity. The hue, however, is still red.



Sufficient gray has been added to this apple to make the color barely perceptible. There is very little intensity.



Starting with full intensity colors at the left end of the bar, we have gradually reduced the intensity of each color by adding more and more gray as we painted toward the right, until we

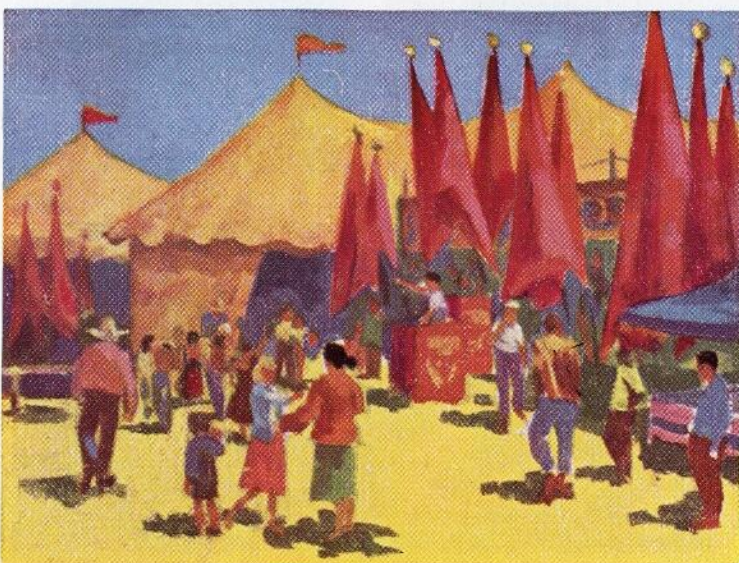
reached pure gray. In this case we have changed only the intensity, not the value. Squint your eyes, and notice that the value remains the same throughout the entire length of the bar.



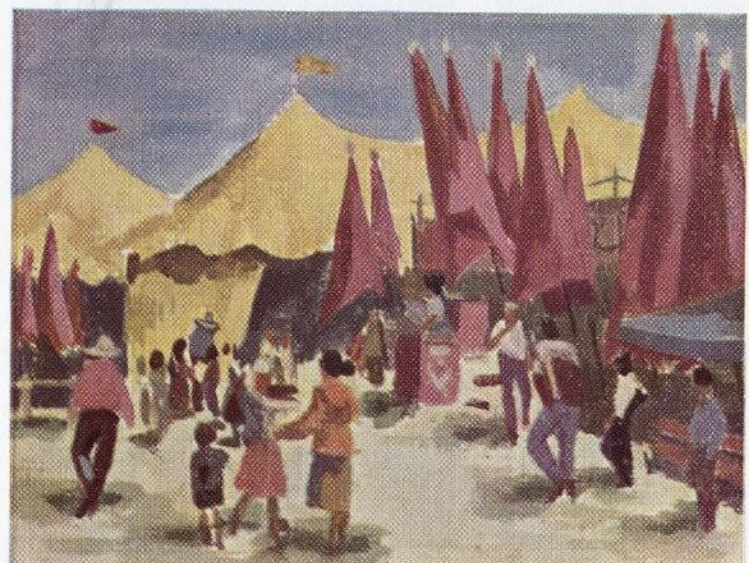
Here is a picture full of high intensity colors. Many have been made with pure pigment just as it comes from the tube.



In this picture we have taken the same hues that you see in the picture at the left, and lowered their intensity by adding gray to each color.



This sunny circus scene contains intense reds, yellows and blues. The shadows, as well as the lights, contain pure strong colors.



Here is the same picture painted in low intensity. Compare it to the one at the left. In the painting above, each color has been grayed.

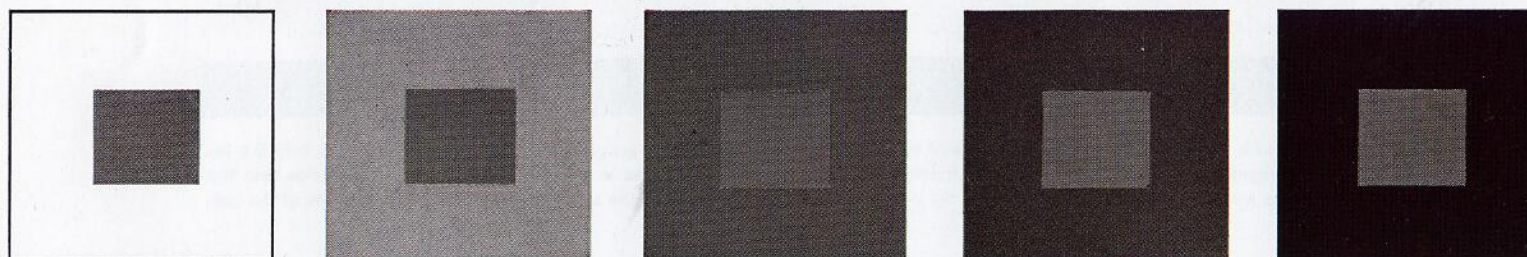


## One color affects another

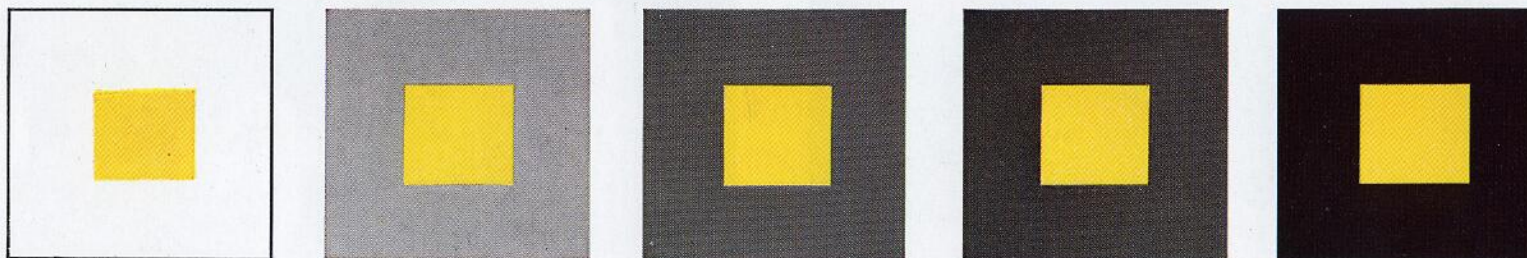
Whenever you use one color in a painting, it will always be affected by the colors around it. As you gain painting experience, you will be able to anticipate these effects of one color on another.

For example, when you first lay in your shadow tones on a piece of white paper or canvas, they may appear too dark. This is due to the white area around them. As soon as you have

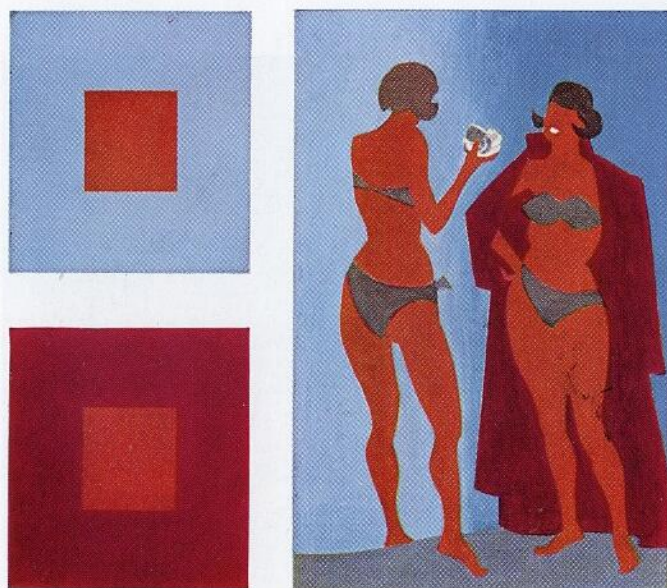
covered the whole canvas, the shadows begin to take their proper place and appear just right. This illusion of a change of values is the most common problem for the painter in handling color. However, the hues and intensity of every color are also affected by the colors next to it. You will find that painting is actually a process of making constant adjustments of hue, value, and intensity.



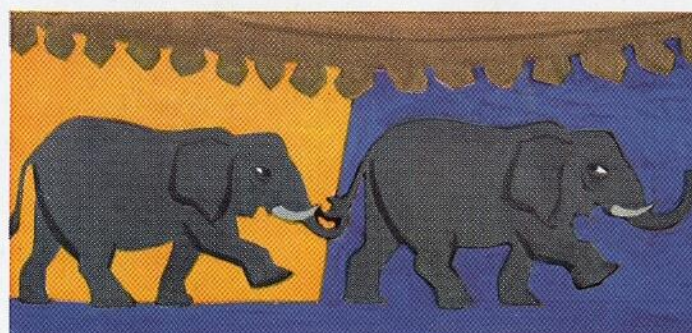
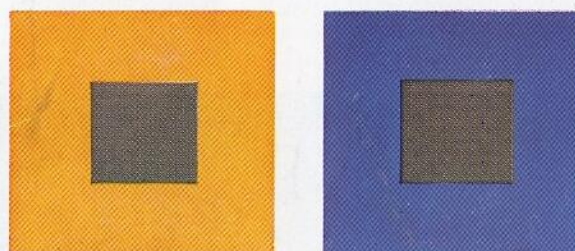
This series of five squares-within-squares illustrates how variations of value can affect one another. The inner squares are of the same value from left to right; only the background values are changed. Notice how much lighter the inner square on the extreme right appears, in contrast to the one on the far left.



The illusion demonstrated above in gray tones is similar when we use color. All these yellow squares are exactly the same, but as the background becomes progressively darker, the yellow squares appear to become lighter. This principle can be used effectively in emphasizing, or subordinating, any area in your picture.

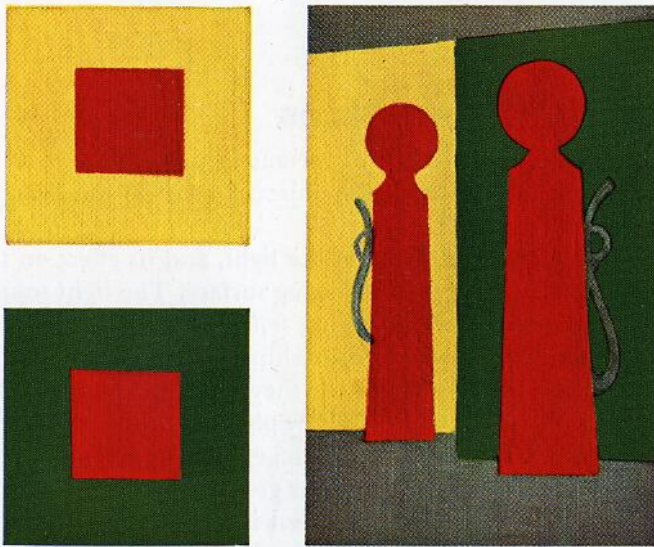


Both figures were painted with the same color, but the red looks darker and cooler against the light blue sky; lighter and warmer against the darker red robe. See how this is emphasized in the squares on the left.

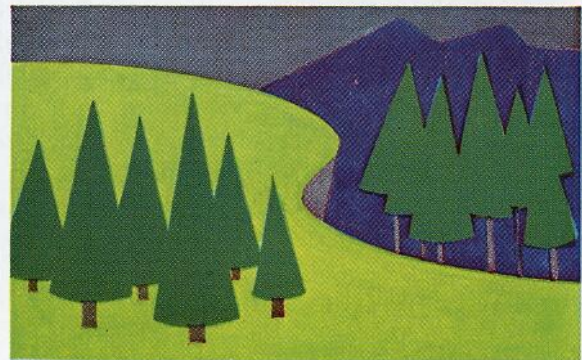
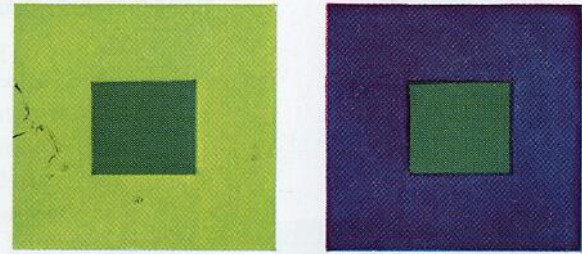


Both elephants are the same gray. The one at the left appears to be a dark, bluish gray, the other one a light, yellowish gray. The color squares demonstrate the same illusion.





A strong red appears lighter, and slightly orange, when set against a dark green. Opposed to a yellow, the same red appears darker and cooler.



The small inner squares, and the two clumps of pine trees, are all the same color. Notice how much lighter and greener they appear against the darker backgrounds. Against the lighter yellow-green, they seem much darker and bluer.

## Advancing and receding color

Every painter should be familiar with the way in which some colors appear to come forward, while others seem to recede. He can use this knowledge either to stress or subdue the feeling of depth in his pictures.

Warm colors, like reds, oranges, and yellows, actually appear nearer to us than cool blues, greens or violets, seen from the same distance.

In addition to becoming *cooler* with distance, colors also become *lighter* and grayer, or less intense. This is due to the

atmosphere between the object and our eyes. The use of these color-changes to create the illusion of distance in a painting is called *aerial perspective*. The picture below demonstrates how this principle works in a painting. Although the earth in the plowed field is the same throughout, the foreground *appears* most intense in color. See how the color gradually becomes grayer, cooler, lighter, in the distance. The same principle has been used to create the illusion of great distance between the nearest and farthest hills and mountains.



These receding colors are used to give distance to the mountains at the left.

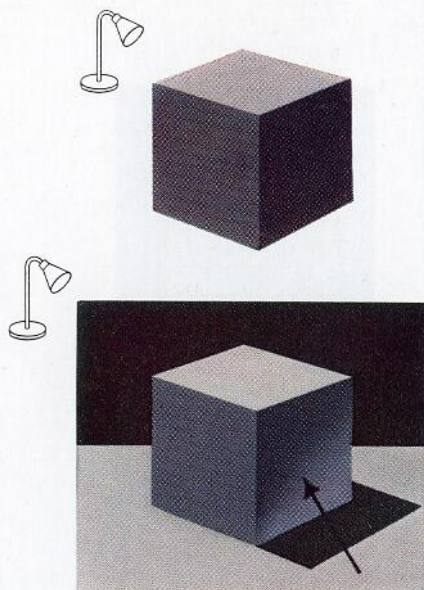


Here are the greens in the rolling hills.



These are the colors in the plowed field.





## Color under different light conditions

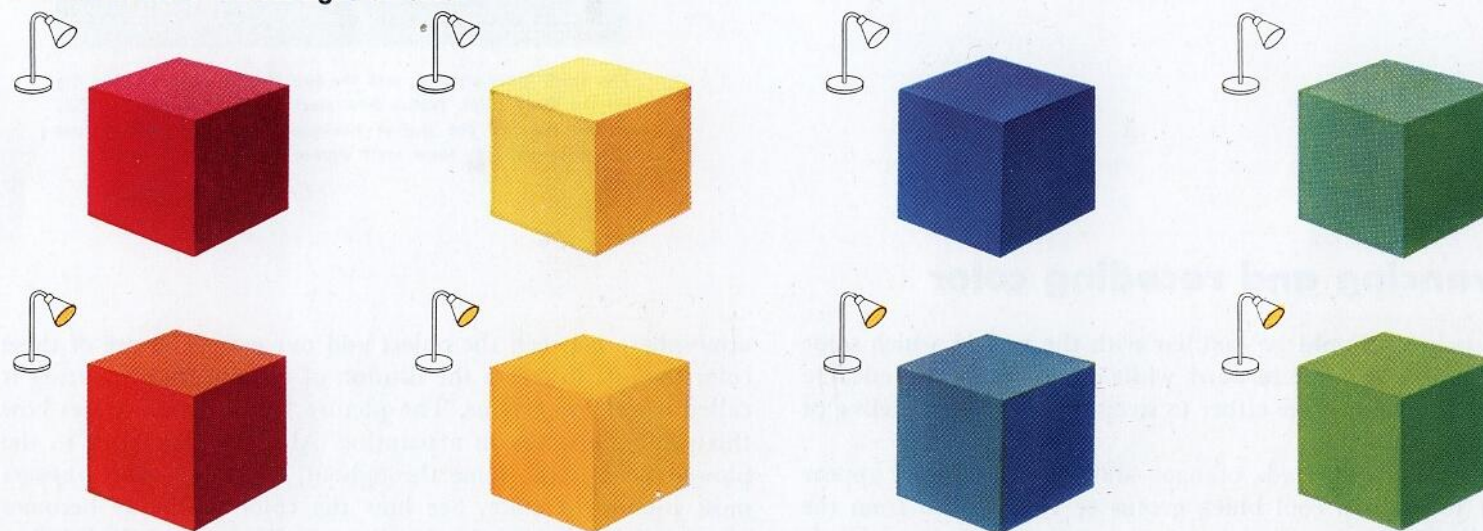
The color of every object you see is determined by three important factors: 1) the local color of the object; 2) the color of the direct light under which the object is seen; 3) the local color of any surfaces which reflect light back upon the object.

At the left, above, is a solid cube showing the direction of the light, and its effect on the three visible planes. Below this cube is another cube, set on a reflecting surface. The light source is the same. The shadow plane at the right is the only plane receiving *reflected* light.

All the colored cubes below retain the *same value* relationships in the light, half-tone, and shadow planes, regardless of the color of the light under which they are seen. To paint the cubes illuminated by yellow light, we added a small amount of yellow pigment to the colors of the top and left vertical planes. If we added the same amount of red, orange, blue, or green, we would create the illusion that the cube was seen under red, orange, blue, or green light.

In the bottom row of cubes, the color of the shadow plane showing reflected light depends on three factors: 1) the color of the direct light; 2) the local color of the reflecting surface; 3) the local color of the plane receiving the reflected light. To paint the shadow plane showing reflected light, we added a small amount of *reflecting surface color* to the shadow plane.

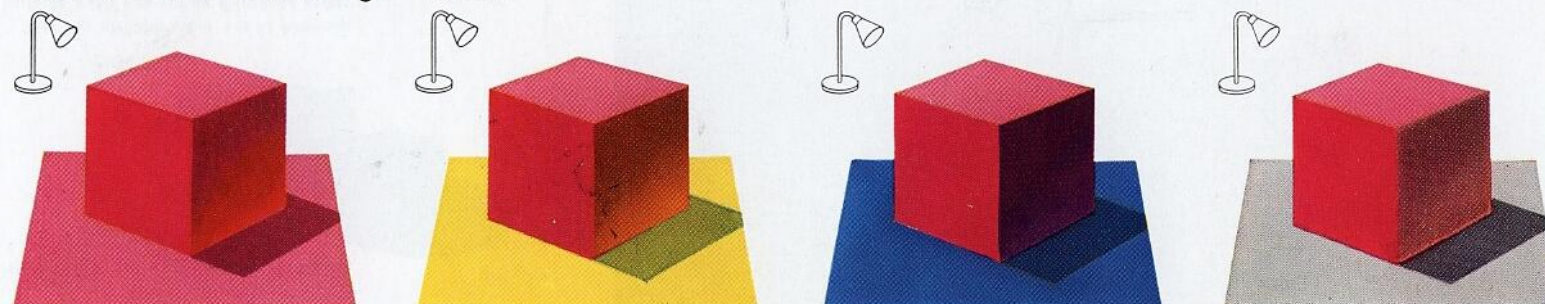
### The influence of direct light on color



The cubes in the upper row, above, were dipped in buckets of red, yellow, blue, and green paint, and placed under a neutral white light. This light reveals true local color accurately. You will notice that within each cube, the colors of the planes differ slightly. The true local color, the color in which the cube is dipped, is seen best in the vertical plane at the left, where the color is least affected by strong light or shadow. In the lower row, the same cubes have been placed under a warm yellow light, similar in effect to sunlight, or the warm light from a lamp bulb. This change in light affects the colors in only the top and left vertical planes.

Compare the planes of the cubes in the upper row with the same planes of the cubes in the lower row. Notice that the colors of these planes under the yellow light are definitely warmer than under white light. To mix a paint which would demonstrate the effect of yellow illumination, as shown in the lower row, we simply added a small amount of yellow to the original local colors of the two planes, as seen in the upper row. Since none of the yellow light strikes the shadow planes in the lower row, the shadow planes of both rows of cubes are the same.

### The influence of reflected light on color



Here is a red cube, placed on four reflecting surfaces of different colors. The cubes are illuminated directly by white light. In all the cubes, the top and left vertical planes are exactly the same. But notice what has happened in the shadow planes. They are modified by the colored light from the reflecting surface. The red reflecting surface intensifies the red color of the shadow plane. The yellow reflecting surface creates an orange tone in the shadow plane. The blue creates a violet tone. The gray reflecting surface is neutral, and therefore the reflected light does not change

the hue of the shadow plane. In each case, the top and left vertical planes are unaffected by this reflected light. The artist must be aware of this effect of one color on another, and make it work for him in all his painting. In this demonstration, we have used simple cubes. Remember, though, these same principles apply to everything—clothing, flesh, a building, the side of a hill, any situation in which we have direct and reflected light.



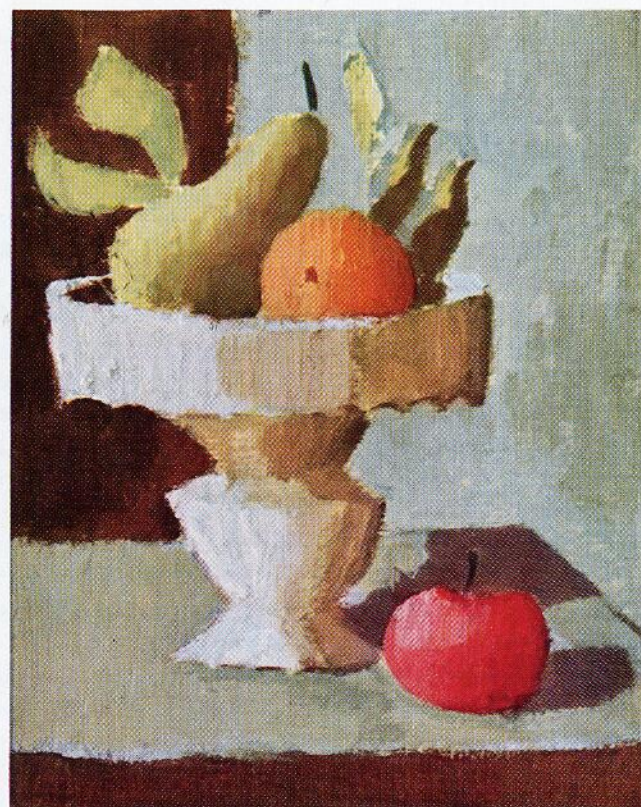
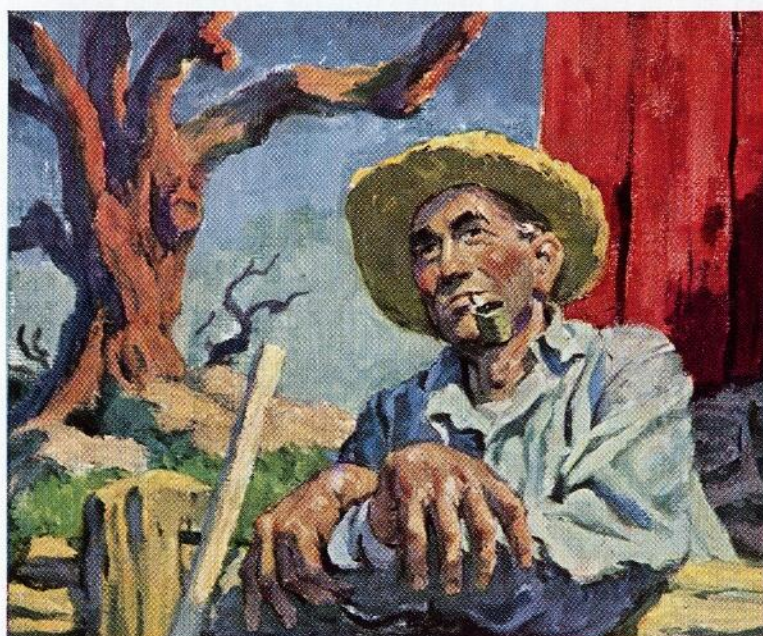


This still life is struck by a warm yellow light that might be either sunlight, or warm artificial light. Each plane in light is warm, each shadow area, cool. Although the compote is actually white, in this light it appears slightly yellowish.

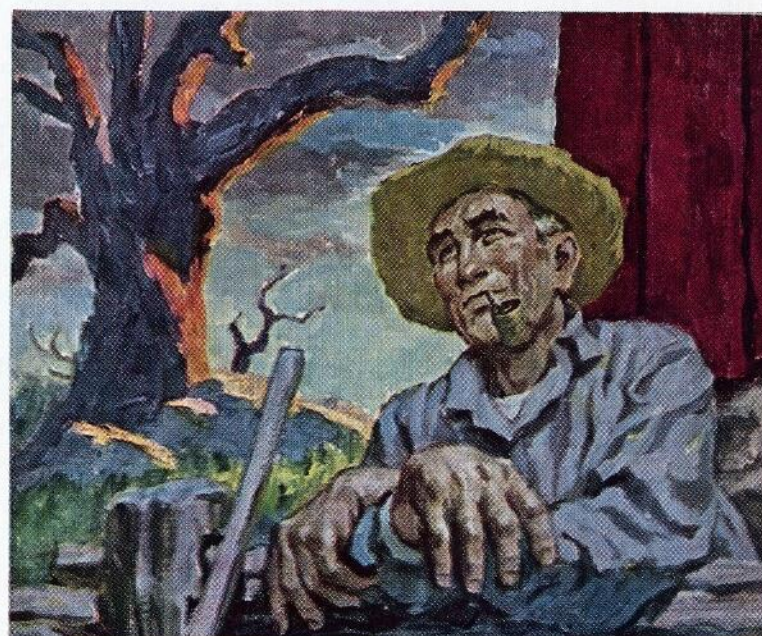
### Different lights create different colors

Before you start any painting, decide first on the *effect* you wish to create, then on the colors needed to produce this effect.

Make it a practice to study the color differences caused by various types of lighting, such as sunlight, artificial light, moonlight, fire light, the light on a cloudy day, etc. As you view the scene under these different lighting conditions, analyze it. Picture in your mind's eye the colors you would use to paint it. Study it through squinted or half-closed eyes. This eliminates any confusing details and makes it easier to compare the hue, value, and intensity of each color. On this page, you will see that there is no such thing as a ready mixed flesh color, or sky color, or grass color. Each different type of lighting creates a new set of colors. The only way to know and understand what happens to color under different conditions is to observe and remember the color characteristics of each type of illumination.



In this picture the light is cool and bluish, like the light that would come through the window on the north or shady side of a building. The light planes are cool, the shadows relatively warm.



The barn casts a shadow over the fence and farmer. The cool bluish light within this shadow comes from the sky. Only parts of the grass, rocks and tree are struck by direct warm sunlight.

This is how the scene would look in direct sunlight. To create this effect we use warm colors such as red, yellow and orange in the light-struck planes. The shadows contain cool blue and violet tones.



## The emotional effect of color

Colors have a strong effect on our emotions. They can create almost any kind of mood. According to where and how they are used, they can make us feel cheerful or depressed, excited or soothed, filled with longing, or at peace. In paintings, quite apart from subject matter, drawing, or design, they can be used to affect the emotions of the viewer in any way that is required.

Because of this, it is vital for you to learn as much about these effects as possible, to gain control of them, and to take full advantage of them to create the mood you want in your pictures.

You are probably familiar already with the more usual associations between color and emotion, such as red suggesting excitement or heat; blue, calm or distance; green, nature or coolness; yellow and orange for sun and sunshine; violet, mystery. Later we discuss these associations and color symbolism in detail.

Now, open your own awareness much, much further. See the extent to which color is used in all art forms to induce mood and emotion. In the theater you see it used for lighting and costumes, for atmosphere and setting—even for characterization. For instance, pink may be used for scenes of sentiment and romance, a green light for ghostliness and horror, blue to suggest moonlight and evening. Bright, warm colors in light and costumes are used for excitement and gaiety, and cool grayed ones for a mood of stillness or despair. Movies use colors in the same way, and so does color television.

The visual art forms, however, are not alone in using the effect of color. Look at this excerpt from *Gone With The Wind*, by Margaret Mitchell, and see how strongly we react to a written description of color.

“Spring had come early that year, with warm quick rains and sudden frothing of pink peach blossoms and dogwood dappling with white stars the dark river swamp and far-off hills. Already the plowing was nearly finished, and the bloody glory of the sunset colored the fresh-cut furrows of red Georgia clay to even redder hues. The moist hungry earth, waiting upturned for the cotton seeds, showed pinkish on the sandy tops of the furrows, vermilion and scarlet and maroon where shadows lay along the sides of the trenches. The whitewashed brick plantation house seemed an island set in a wild red sea, a sea of spiraling, curving, crescent billows petrified suddenly at the moment when the pink-tipped waves were breaking into surf. For here were no long, straight furrows, such as could be seen in the yellow clay fields of the flat middle Georgia country or in the lush black earth of the coastal plantations.”

### Applications in other fields

In many other forms of art, too, color is drawn upon to create emotional response. In hospitals, rooms are painted in soothing colors where patients are to convalesce or wait, and in more stimulating colors where they need to be cheered and encouraged back into activity. In factories, stores, and organizations of all kinds, colors are used as backgrounds to enhance products, induce well-being for employees, and in general increase the customer's desire to acquire products. In the fashion world, a garment in a particularly appealing color will sell out immediately, while the same garment in another, less enticing color, will not move off a rack. The colors used in travel folders can affect us so strongly that we yearn to visit a place.

Weather affects us powerfully, also, with its shifting colors. A clear day in which all the colors of earth and sky are brilliant, warm, makes us optimistic, gay. A day with little light, and therefore little color, can lower our spirits for no other reason. On a brilliant, hot day a pool of cool blue will look wonderfully inviting. See how the same color can create an opposite effect, however. Imagine the same cool blue pool on a cold, gray day. The warm red of a fire on a hot day will make us feel stifled but the same red on a gray day will make us feel cozy. By using the varying colors of the seasons, too, you can re-create the hopeful feeling of spring, the finality of fall, the laziness of summer, or the bleakness of winter, no matter what season it really is. The effects of color are too numerous to list, so look around you and observe for yourself as many as you possibly can.

### Make color symbols consistent

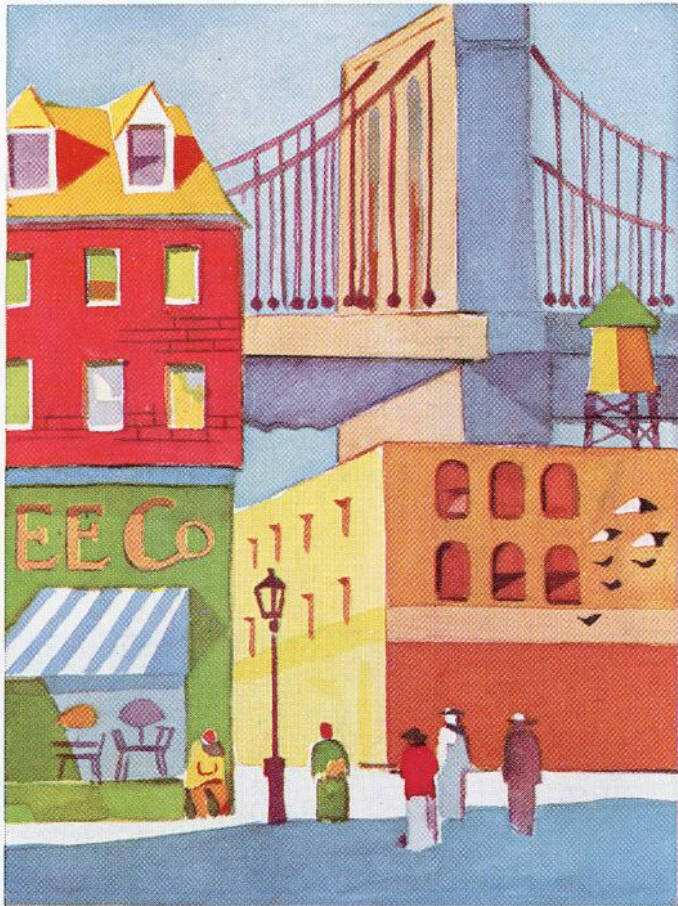
You will find it helpful to study paintings, as well, for their color content alone. With experience, you will soon learn that certain artists are so consistent in their choice of colors that you could recognize their work from a distance, without even seeing the subject matter on which it is based. Try to visualize, as a test, how ineffective a painting by Rembrandt would be if the harsh, clashing colors of Van Gogh were substituted for the warm, low-keyed reds and browns. Note how other painters, like Ryder, Caravaggio, La Tour, and El Greco, have chosen palettes and colors that invariably give an aura of mystery to their work. In sharp contrast to these men is the work of such painters as Dufy, Bonnard, and Monet. Their bright, high-keyed colors make the majority of their work seem festive, full of light.

The artist should have a good understanding of color associations and symbolism and keep them very much in mind when he plans a painting. In one picture he may want to create a light and airy mood. In another he may wish to surround his subject with a somber, brooding atmosphere of mystery. Certain colors immediately suggest certain moods to the average person, so each of these paintings calls for the use of different colors. In every picture the artist must apply his knowledge of color and how people respond to it if he is to achieve the effect he wants.

You may, of course, take liberties with the accepted and credible but you should always have a good reason for doing this. Sometimes you will find situations where the natural color of the subject matter contradicts the effect that you want. This may be due to a number of elements, such as the color of the light, or surroundings, etc. The circus scene with the elephants, referred to on the opposite page, is an example of this. Therefore, before picking up your brush and starting to paint, you should always ask yourself a number of questions. Some of them should be: Are these colors typical of the subject? Do they create a warm or cool effect? Which effect do I want? What colors might suggest the right mood? Are the colors in good taste? Should some colors be grayed, others made more intense? Should the over-all effect be colorful or muted?

It is wise to make this rule for yourself and keep to it faithfully. Before you even squeeze your colors on your palette, try to visualize the effect you want and how you are going to create it. If you follow this rule you will be in a good position to use color to its fullest advantage.





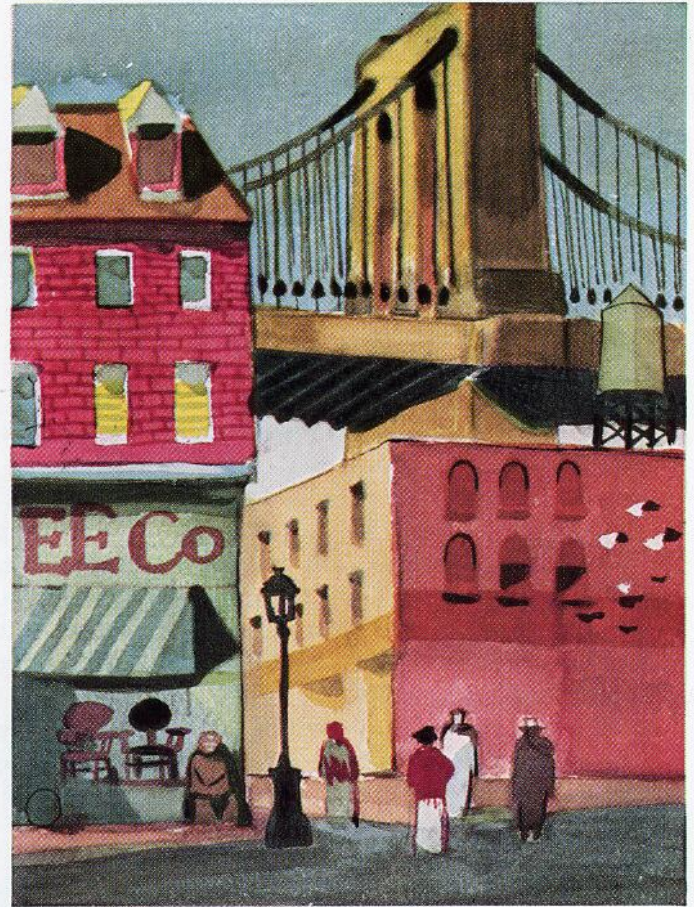
Here, the artist wanted a gay, sunny mood. The picture was painted in a high value key, with pure intense color dominating the scene. The swatches below the painting are typical colors found in the picture.

### Color creates different moods

The paintings on this page demonstrate how you can use color to produce a definite *mood* in your picture. It is important to choose colors which will strengthen the other elements in your picture — subject matter, drawing, and composition. For example, the light, gay mood of a party, circus, or wedding, suggests a high key painting full of bright colors. Dark, low intensity colors would be better suited to a scene of mystery or tragedy.

Often, you will find that the actual colors in the real scene do not coincide with these principles. For example, a certain view of a circus scene may be dominated by dull gray elephants, seen against the dark blue or violet shadows of a tent, or the dull brown earth. The clothing of the trainers, or handlers, may consist of dull gray cover-alls. From the standpoint of color, the scene actually suggests drabness.

If your painting is to have a gay, carnival spirit you must either select another, more colorful scene, or change the colors to gayer, more festive ones. In any case, be sure that you control the colors in the painting, to create the mood you want.



This is the same scene painted with colors that are factual and objective. The artist simply matched the colors that he saw, as accurately as possible. A color photograph would be very similar in color to this painting.



In this case, the artist chose colors which were very low in value and intensity, to create a mood of darkness, gloom, and mystery. Compare the swatches beneath this picture with those below the first one.



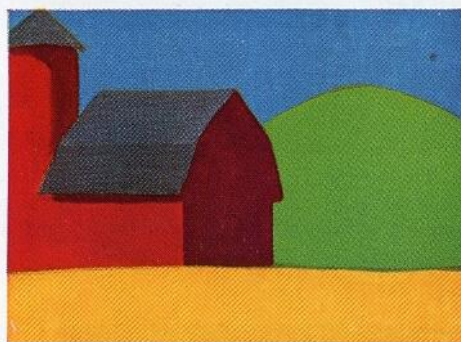
## Color proportion

Color in paint, like color in decoration or dress, can be abused, or used in good taste. Although all of the hues in the color wheel are available for use in your pictures, you will probably never employ all of them, at full strength, in a single picture. If you study the colors in good paintings or illustrations, you will be surprised at the limited range of hues that you find in most of them. In fact, one of the major problems for the beginner in colors, is to avoid a tendency to put every pigment on his palette into each picture.

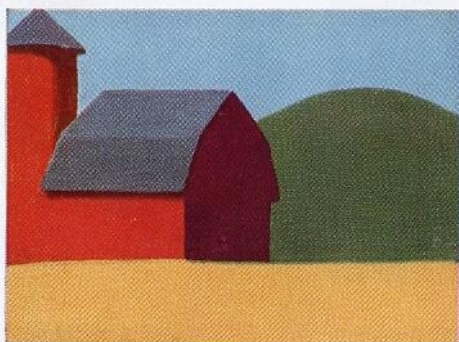
The experienced artist uses fewer hues, but takes advantage of the infinite number of color differences which can be created by

variations of *value* and *intensity*. For example, a red can be varied to produce a pink or brown.

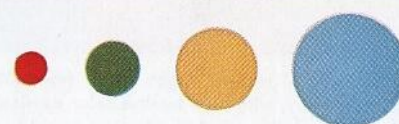
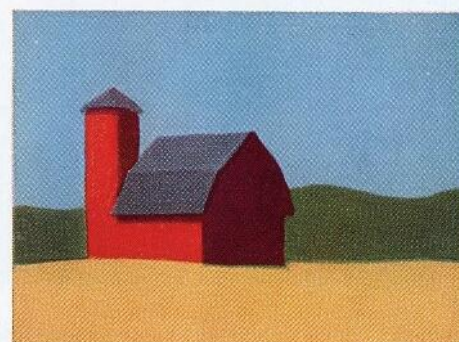
Normally, bright, advancing colors serve their purpose best in small areas to attract attention — as accents. A good decorator uses this principle skillfully in planning an attractive living room. Background colors are quiet, livable, and neutral. Against such backgrounds, a sparkling accent, or small brilliant area of color is most effective. The same principle applies to paintings. Don't use several equally intense colors in the same-sized areas. They will compete with each other, and their individual effectiveness will be canceled out.



The color proportion, or distribution, in this picture is very disturbing. All four colors — red, yellow, blue and green — are equally intense, and fight each other for attention.



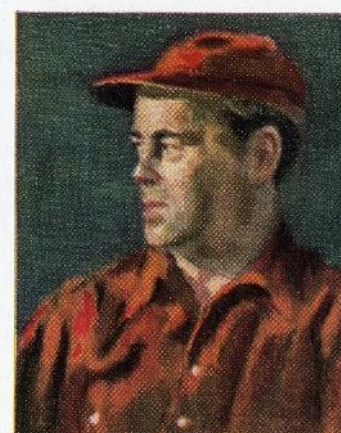
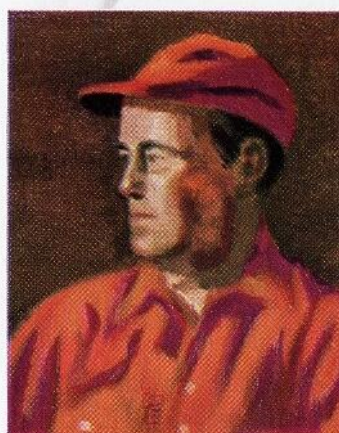
Changing the *value* and *intensity* of some of the colors helps to eliminate confusion, and improve the picture.



Finally, by changing the size or proportion of the areas, we create a pleasant and well balanced color scheme, with the barn as the center of interest.

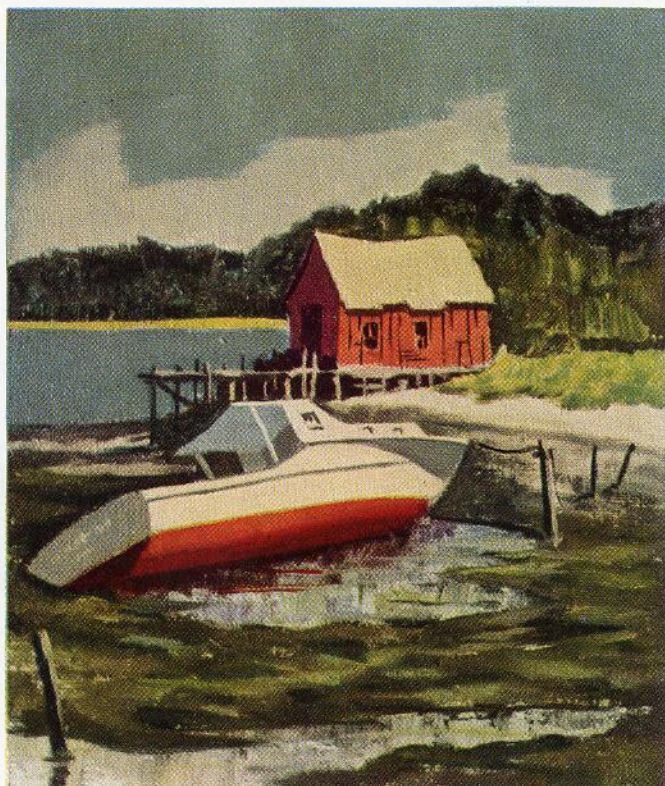


An overpowering amount of yellow has been used in the picture at the left. Yellow is the most advancing of all hues, and hence one of the best accent colors; but *all* accent is no accent. In the picture at the right, the yellow is confined to the girl's skirt, and is in good proportion to all other colors in the painting. It now stands out as a pleasing accent.

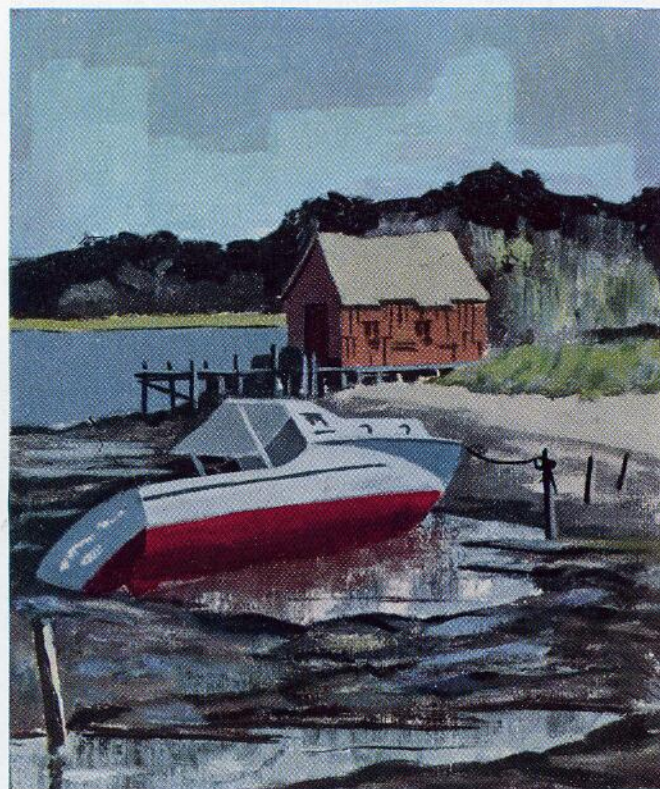


At the left, is a typical misuse of color. Because the man's jacket is red, the beginner painted almost all of it with pure red from the tube. This same red, repeated monotonously in the background, overwhelms the color in the face. At the right you see a more tasteful way to paint the same subject. A few, small accents of pure red are enough to show that the jacket is red. Now, the head stands out clearly against the less intense color in the jacket and background.





In painting this picture, the artist added a small amount of yellow to all the colors on his palette. This creates an over-all effect of great warmth. The swatches in the bottom row show how this addition of yellow affects the pure pigments in the top row.



Here is what the same picture would look like if we added a small amount of blue to our usual palette of colors. Now the whole picture is cool.

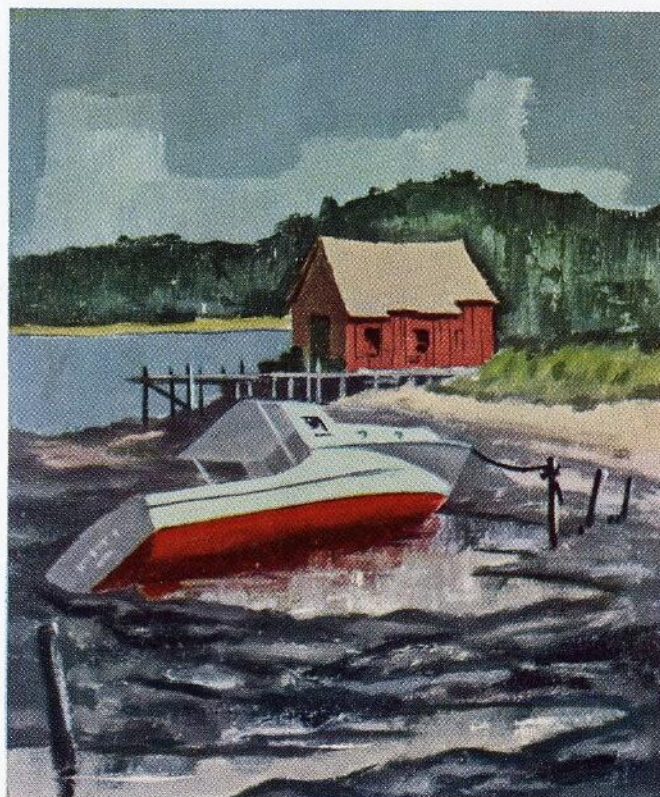
## Set palette

One of the simplest ways to achieve color harmony, or unity, in your picture is to paint it with a *set palette* of colors. This can be done in various ways. The pictures on this page show how to create color harmony by adding a small amount of any *one* color, or gray tone, to *all* the others on your palette. Note that the added color has greater effect on its "complementary" (color opposite on the wheel), less effect on the colors adjacent to it. You can vary this procedure by adding one color to all the light areas in your painting, and another color to all the shadows. These added colors may be warm, or cool, depending on the effect you desire. If you wish to emphasize one color in your picture, the color you choose to add can be mixed with every other color, *except* the one to be accented.

This principle can be extended to emphasize two or more colors. You can create value harmony, and establish the key of your whole picture by adding a light, middle, or dark value of any hue to each color on your palette. Since the colors which you add to your regular palette can vary in hue, value, and intensity, the number of combinations is endless.

A set palette is not suitable when the chief objective is to obtain an accurate color record of nature. In that case, you should match the hues, values, and intensities of each color in your subject, as closely as possible, using any and all combinations of colors. If you wished to paint the same subject with a set palette, you would add a small amount of unifying color (or colors) to each of the colors in the realistic painting.

When using a set palette, you must be consistent throughout the entire picture, or the whole purpose of creating unity and harmony by this means is defeated.



This time, we have lowered the intensity of the colors by adding a small amount of gray to each one. The color effect is soft and muted.





Courtesy True Magazine

This painting by John Atherton is an excellent example of color used in an imitative or *naturalistic* way to create an illusion of reality. The hues, values, and intensities of the colors are based very literally on those the artist saw in his still life objects. The forms are almost photographically real; it would have seemed inconsistent if the colors were not equally accurate.

## You can use color in two ways

The colors in this painting, also by Atherton, have been used in an entirely different way than in the picture above. These colors are the product of his imagination, rather than the record of what he saw in front of him. This is an *inventive, creative* use of color. No one ever saw these objects as they appear here. The forms are based on natural objects, but they have been modified and adapted by the artist to suit his design. The colors have been used in an equally arbitrary way.





## Using what you have learned about color

Color can make your pictures successful or it can mark them instantly as the work of an artist lacking the knowledge and ability to use color intelligently and artistically. The people who see your work can be just as depressed or exhilarated by its color as they can be by the weather. You must decide early in the development of your picture just what color "climate" you want to create.

To use color effectively you must possess a sound knowledge of its three parts — hue, value, and intensity. Besides having a good understanding of these basic principles and applying them in your pictures, you must also make sure that the colors you choose are appropriate to your subject and consistent with the concept of your picture.

Suppose that you are painting a very realistic or naturalistic picture of a pine tree. It makes sense that the colors you use should be just as realistic or natural as the actual tree is. On the other hand, if you are interpreting the tree in a more personal way and are taking deliberate liberties with the design and drawing, your use of color should be just as free and imaginative.

The color reproductions of the paintings on the facing page are excellent examples of color used in its most effective way. In each case the artist's approach to color is based on his original concept of the painting.

In the painting of the fish the artist's main interest is in creating the illusion of reality. He is reporting very literally what he saw. Because he drew the forms just as they actually appear, he used his color in the same way.

Try to imagine this picture with the fish's spots a bright red. We are sure you will agree that no matter how beautiful a red it might be, or how well it related to the rest of the picture in value and intensity, it would be a very incongruous addition to an otherwise completely factual picture.

In the second painting the artist has taken his forms and designed them in a very personal way. He was not trying to make a realistic picture, although he used real objects as a starting point. His purpose here was to create a highly individual and original design of interesting shapes, textures, and color combinations.

Since the artist was not trying to paint an illusion of reality, he no longer needed to represent the objects with their factual color and was able to select and use his color in a more personal and arbitrary way. For instance, he found the strong contrast of the yellow against black and gray exciting, and did not hesitate to use it even though this color combination was not present in his subject.

As you paint more and more pictures you will find your work developing a distinctly personal style. With experience and increased confidence you, too, will feel free to give color fuller rein — not feel compelled to copy what you see, but originate, invent and create exciting color combinations.

The success of a picture depends very much upon the psychological effect it has upon the people who see it. If they see color and color patterns which please them, they are attracted to the picture consciously or unconsciously. It is your job to see that they are attracted.

### Choosing your medium

Just as the picture can often dictate how you interpret color, it can also to some extent dictate your choice of medium. Effects vary greatly with the medium, and in planning a picture you should decide which one will suit it best. Eventually you should become familiar with all mediums. As you acquire experience, you can tell very quickly which medium and which colors offer the most intelligent solution to the problem of the moment.

Oil paint is the traditional painting medium. It is most versatile in the effects you can achieve with it. It can be applied thinly or thickly, so that surfaces ranging from perfectly smooth, flat ones to heavily textured ones are readily created. Because of the opacity of oil paint it is easy to make changes, but it does take much longer to dry than any of the water-soluble mediums.

The word "tempera" generally means any opaque water color or gouache. Tempera is usually applied rather thinly; excessive piling up of paint results in cracking and flaking. It dries quickly and has a lovely mat surface. Another opaque water-soluble medium which has found widespread use is casein tempera. It can be handled thinly like ordinary tempera or, because of the strength of its casein binder, built up like oils. It can be used by itself, in combination with other water colors, or as an underpainting for oil paint.

Transparent water color is useful when light and airy effects are desired. Its spontaneity and immediacy lend themselves quite beautifully to certain atmospheric effects. Acrylic or polymer paints are becoming increasingly popular. They can be used in various ways — as a thin wash or thick opaque, for example.

Colored inks and aniline colors and dyes are sometimes used individually, but frequently they are combined with other mediums in the same picture. As you experiment with the various mediums you will soon discover which are best for your own work. You should try each medium and become familiar with all of them.

### Using color to suggest mood

One of the ways you achieve mood in a picture is by composition or the placing of your objects and forms. You can also suggest mood by the use of color. As a rule, you would not do a quiet, sentimental scene in hot reds and yellows and you would not use cool grays for an exciting, violent picture.

As we said before, color has a strong effect on people and causes definite reactions. Red, for example, is a universally successful color in advertising because of its elementary qualities of



strength and visibility and its appeal to the basic instincts of people. Red suggests strong emotions and, by varying the shade, you can suggest variations of such emotions. A bright, clear red generally is most pleasing, while a dark, dirty red can suggest powerful emotions such as passion and hate.

Orange has great warmth. It lends itself well to grayed tones and is usually a good color to use when friendly or warm human qualities are to be expressed. It is also an *appetizing* color and goes well with pictures of food and interiors. Yellow is a cheerful, happy color, suggesting sunlight and life. A yellow set against a dark or black background stands out more clearly and sharply than virtually any other color in a combination.

Green is nature's color and gives an effect of outdoors and growing plants. In its yellow-green tones it combines well with yellow to provide a cheerful atmosphere. In its cooler or bluish-greens its effect is nearer to that produced by blue, which is a color suggesting distance, air, water, and a quiet, peaceful atmosphere. Blue can also give a picture a gloomy, somber quality when its tones are dark and grayed.

Purples and violets are also useful for expressing dark and serious moods in a picture. The red-violets are very rich and hence can be used to indicate luxury and elegance of background. A predominance of grayed blue-purples is likely to be depressing. Avoid them unless you are purposely trying to suggest such a mood.

All of these colors can be darkened or grayed, and then they produce different effects. Richness or, in some cases, a serious or gloomy atmosphere will be suggested, particularly if the surrounding colors are similarly grayed or darkened. In doing a still life of food or drink, avoid suggestions of blue, green-blue or purple in the food or drink unless they actually appear that way. These cold colors suggest mold and decay, just the opposite of the freshness and warmth which you probably desire to suggest.

### Colors affect each other

All color in nature is affected by its surroundings and in turn has its effect on its surroundings. Think of a color not only as a color by itself, but also in relation to its neighboring colors in the picture — how it affects them and is affected by them. We will not consider the chemistry of color or its scientific aspects involving the breaking down of light into the spectrum. Instead, we will approach the subject more directly by considering just how the colors which you buy in an art supply store can be used in making pictures.

When you paint one color next to another, often it does not appear the same as it would by itself. Our eyes react strangely in such cases. For example, if you place side by side two contrasting colors of the *same value*, such as bright red and bright green, you will find that they vibrate or “jump,” and the effect is disturbing and confusing. But if you mix a little white or black with one or the other to change the value, the effect becomes much more pleasing.

Always keep enough difference in values between adjoining colors to avoid this “jumpiness,” unless you are striving for such an effect. When the colors are more grayed and not so bright, they can be combined in nearly the same values much more successfully, but in placing contrasting colors side by side it is always best to darken or lighten one to create a variation in their tonal relationship. This gives added interest to both colors.

You can combine two contrasting colors or two complemen-

tary colors successfully by adding a little of each color to the other. If they are used in their pure form, the contrast may be too harsh. The slightest alteration will often effect a proper balance.

We have found by experience how certain colors affect each other when placed together. Earlier we saw that probably the strongest contrast is obtained with yellow on a black background — it is even stronger than white on the same background. Yellow has the quality of “carrying” well and can be seen at a great distance. But yellow on *white* is hardly visible at a distance. Each color is altered in appearance when placed against a light background or a dark one. Light colors look darker against light backgrounds and lighter against dark backgrounds. Much stronger color can be used against a black background or with a black separation or outline than if the black were some other color.

Some modern painters achieve a sort of stained-glass effect by using very pure color separated by heavy blacks. The results can be very beautiful because the colors do not seem to defeat themselves as they would when used without the foil of the black to separate and enhance them. If you use a gray next to a strong color, the gray will then tend to appear more like the complementary of the strong color than if it were by itself. Sometimes it is necessary to alter such grays to overcome the optical illusion resulting from such contrasts.

### Handling black, grays and shadow areas

Black — theoretically the absence of color — will be considered here as a color. It is one of the great colors in art and you should learn to use it intelligently. You can get it in a tube or it can be mixed in many ways. It is one of the great foils for other colors, particularly brilliant ones, and gives them added interest by accentuating their qualities. Black can be used as a means for darkening or graying other colors or a neutral gray can be made by mixing black with white. Grays made from black and white are likely to be very cold and lacking in quality unless used with other grays or tones of color which enhance them. However, many artists prefer to obtain grays and middle tones by the use of color itself. By this we mean grays made from *colors* which together give the effect of grays. Colorful grays may always be mixed by using complementary colors and white together, leaning toward one or the other color to make the grays warm or cool.

Shadows are never a solid or opaque color. Invariably they are lighted in some way by the reflection of surrounding colors. Of course, when you do a decorative picture or a design you should not be governed by a realistic color approach. The design itself, and not the shadows as we observe them in nature, will dictate the color. In a painting intended to reproduce natural effects, shadow areas can frequently be a means of introducing interest where otherwise it would be impossible to do so. Shadows often provide an opportunity for your imagination to have free rein.

Avoid the harsh purplish tones which can make a shadow so unattractive. If a shadow is warm, a suggestion of coolness at its edge, where it turns into the light, will help give it more luminosity and reflected light, and avoid an unnatural opaque quality. A warmth along the edge of a cool shadow will create the same effect. Remember these points when painting shadows.

Usually the pigment should be thin in shadows and heavy in the areas of light. The most strongly lighted areas are the



most prominent and reflect the most light, so they require thicker paint to suggest this. Do not allow your lights to become chalky, pale or lacking in color. Keep your shadows rich and transparent. A strong color is always best next to a weaker one. Several strong colors together defeat each other and the result is a muddle of gray.

An over-all sameness in paint quality is as bad as monotonous textures. Keep your paint thin where areas are quiet and unimportant. Load it or try to achieve variety in textures where accents are needed. In a picture filled with complicated areas of color, you need occasional relief. Keep some parts simple and flat to make the busy ones stand out by contrast.

### Choosing a palette

In the beginning, limit yourself to working with a rather small selection of colors. Trade names for colors vary, so you may be able to determine the exact color you need by consulting a company color chart or trying the color on paper yourself. When you have learned to control the simple basic palette which we describe later, you'll find it useful to add other colors. In general, these should be colors which give you a warm or cool variation of each basic hue—for example, your more advanced palette might include a warm yellow-green as well as a cool blue-green, a pale yellow and a deep yellow, a hot or orange-red and a cool or purplish red, and so forth. Such variations as these, together with black and white, will take care of most of your needs.

Of the whites, titanium is probably the best for all-around use. Lead white (Chremnitz white) is excellent but is extremely poisonous if it should enter your system through a cut or through the lungs. Titanium is more opaque and covers better than either lead or zinc white. Its one drawback is its tendency to dry slowly. Zinc white has excellent consistency and is very useful when opacity is not desired.

You need not buy the most expensive paint, although good color helps. Try to effect a compromise between cost and quality. Do not sacrifice too much in quality or pay a price that is too high. There are many brands for you to try before you can discover the one which may prove effective for your purposes.

### Doing a picture in color

In the beginning, it will be best for you to use the simplest possible color scheme and treatment in the rendering of all your work.

When you work in color from nature, do not be influenced too much by the local color, that is, the exact color of the object which you are painting. Interpret this color in your own terms, and be more concerned by what the picture needs than in putting down exactly what you see. The color of objects or forms is influenced so strongly by the effect of light upon them that you will find, at times, the actual local color will be almost entirely lost. It will be defined to a great extent by the color of the light and the manner in which the texture of the form reflects or absorbs the light.

Where the surface is hard and reflects light strongly, you will have little local color. Where the surface is soft and absorbs the light, it will be much less affected and will appear more normal. Shadows will be found to tend toward the complementaries of the lights, particularly along their edges, although this is hardly a rule. But your own choice of color, the color which will make the best picture, is more important than observing how color

reacts chemically or scientifically. It is taste that counts most.

Avoid those acid-appearing contrasts. It requires a great artist to place bright orange next to bright green, but you can make these colors beautiful together by toning each one so that neither cries out. When many of the objects in your picture are lacking in color or are of subdued color, you can use a considerable area of bright, pure color as a foil and for contrast. Or, if there are many areas of bright-colored objects and forms, a large, simple grayed tone will make them much more beautiful.

In doing a picture in color, the background color is important and should be established first of all. Then you will be able to select and relate the colors in front of it more easily. Values are extremely important in any color scheme; to determine how they will work out, you will find it helpful to mix several of your important colors and try them next to each other on a sheet of paper. Otherwise you may discover, after painting a large area of your picture, that it must be done over because of the wrong choice of color or value.

When you make grays, some lovely colors can be created by using certain combinations. White and raw umber produce a fine, warm gray. With burnt umber it becomes slightly pink, a fine foil for a cooler, more neutral gray. Some of the dark, shadowy tones which are very useful in a picture can be obtained with a combination of cobalt blue, white and burnt sienna. The tone can be made blue or brown by leaning toward the blue or the sienna. You can also make grays by painting one thin color over another in the picture, instead of mixing them on the palette. These grays, called "optical grays" by the old masters, have infinitely more variety, color and transparency than mixed grays.

Beautiful rich blacks can be created with ultramarine blue and burnt sienna or burnt umber.

Sometimes you will find it difficult to make a light golden brown color appear bright enough. By using pure raw sienna or a mixture of yellows with browns such as burnt sienna or burnt umber, and by keeping the color thin, you can achieve a much brighter effect. The color should be thin enough to allow the white paper or canvas to show through. In fact, whenever you wish to make any color bright and glowing, it is best to keep it thin so the white background comes through to provide transparency. Of course, you can make lighter tones very bright with thicker paint, but in the middle or dark colors it is best to try to retain a feeling of the white background underneath.

To achieve brilliance and purity in colors, mix them with other colors on the *same side* of the wheel. For example, to produce a very bright green, you should use a pale lemon yellow and either a yellow-green or a blue-green, not a purple-blue. You would not achieve as brilliant an orange by combining yellow and alizarin crimson as you would by mixing vermilion and yellow. To gray an orange, add a bit of complementary blue from the opposite side of the color wheel.

When you mix a color, decide in advance which of the colors you are mixing most resembles the desired color. Then start with that particular color. For example, in mixing a yellow-green, start with yellow if the color you desire is to be very light and pale. Start with green if the resulting color is to be on the green side. Adding white will help in such a combination, but do not use much; it will cause your color to be chalky and lacking in richness. Again, if you are mixing a blue-green, start with blue if the final color is to be more blue than green, but if the result is to be on the green side, start with that color.



## Using color to center attention

On the opposite page are four paintings which show you how to put your control of hue, value, and intensity to practical use when it comes to solving an actual picture-making problem. In this case we are going to do a still life. The center of interest is a bottle of perfume. We want to paint it in a decorative setting which will make it stand out clearly and sharply. The effect we want to create is one of gaiety and liveliness.

It is readily apparent that the painting shown in Figure 1 is ineffective. This is due almost entirely to choice of color, both in the bottle and background. The bottle, with the package, box, or wrapper, does not “stand out.” It is lost in overtones of similar colors and values. In spite of the fact that we have centered the bottle in an obvious attempt to make it important, it still does not “carry.” What can we do to concentrate the observer’s attention on it?

To be pleasing, the colors in a painting must be chosen and arranged to create harmonious “overtones,” avoiding harshness and poor relationships. The colors must also be carefully adjusted in hue, value, and intensity. We do have harmonious overtones here — but the colors are *too* harmonious. These colors are all analogous — chosen from one side of the color wheel — with the exception of the few spots of blue. Even the gray drapery behind the bottle is a *warm* gray, and the ground is still warmer in tone.

What the picture needs in order to accentuate the center of interest is a more evenly balanced relationship between analogous and complementary colors, as well as a proper use of contrast.

Our first step will be to work on the bottle itself. In the first picture it is done in rather dingy tones, with no sparkle to suggest glass. Examine the picture shown in Figure 2. The over-all scheme is exactly the same, except that the colors of the bottle and box have now been raised in value and made more intense. A few accents have been added to bring out form and texture. Already we can see an improvement, but more can be done.

Figure 3 shows our first really constructive attempt to make the painting better as a whole. We can easily see that introducing a dark, cool color in the drapery behind the bottle and box has added strength to the picture immediately. The cool, bluish gray provides better contrast with the yellow and orange bottle and box than the previous color did. Next we introduced a cooler gray on the flat, boxlike form which is used as a base for the bottle, and also made the ground area slightly cooler and

grayer. This has an effect similar to the change in the color of the drapery. Now, at least, we can see the bottle more easily and quickly.

There were other obvious weaknesses, so we have rectified them. The shadows were too pale and too near the color of the bottle. We wanted to keep them warm, however, since a warm shadow is more lifelike and pleasant. It suggests the presence of sunlight. Therefore, all the shadows were darkened with a brown of a reasonably neutral hue. Notice how this immediately strengthens the picture. The three-dimensional effect is also heightened. The shell in the foreground is rather disturbing in hue and value. It detracts from the center of interest. Giving it a pattern of dots improves it somewhat, but let’s consider it further. We want the eye to see the bottle immediately, without being distracted by objects in the foreground.

In Figure 4 you will notice that the most important change in the picture has taken place — the introduction of a new and different sky color. It would have been nice to retain the orange sky, to lend the picture that pretty, sweet overtone, but at last it was obvious that it should be sacrificed. Discovering the exact blue took a bit of experiment, since it had to be *right*; not too light or too dark, too bright or too gray. It tends toward a faintly purplish blue rather than a greenish one, which would be harsh and “acidic” when used against or with orange. Notice how much gayer the picture appears. This color adds a note of freshness, and the bottle and box become even more important.

That shell in the foreground had to be changed, too, so we made it a lighter pink. With its pattern of spots it now takes its place without interfering with the bottle. The eye looks right over it. Now we add a few finishing touches to the bottle itself; strong touches of dark and light enhance the “sparkle.”

Let’s summarize what we have done. The most important alterations were the dark gray drapery and the blue sky. Next in importance was the addition of the gray top on which the bottle rests. Of almost equal importance were the value changes in the shadows, designed to give the painting more strength and to increase the illusion of a third dimension. The actual alterations on the bottle were of secondary significance, although one might naturally think of them first. All these changes make the bottle more prominent. The picture as a whole has considerable “sparkle” and color, but there is no doubt about what is the center of attraction.

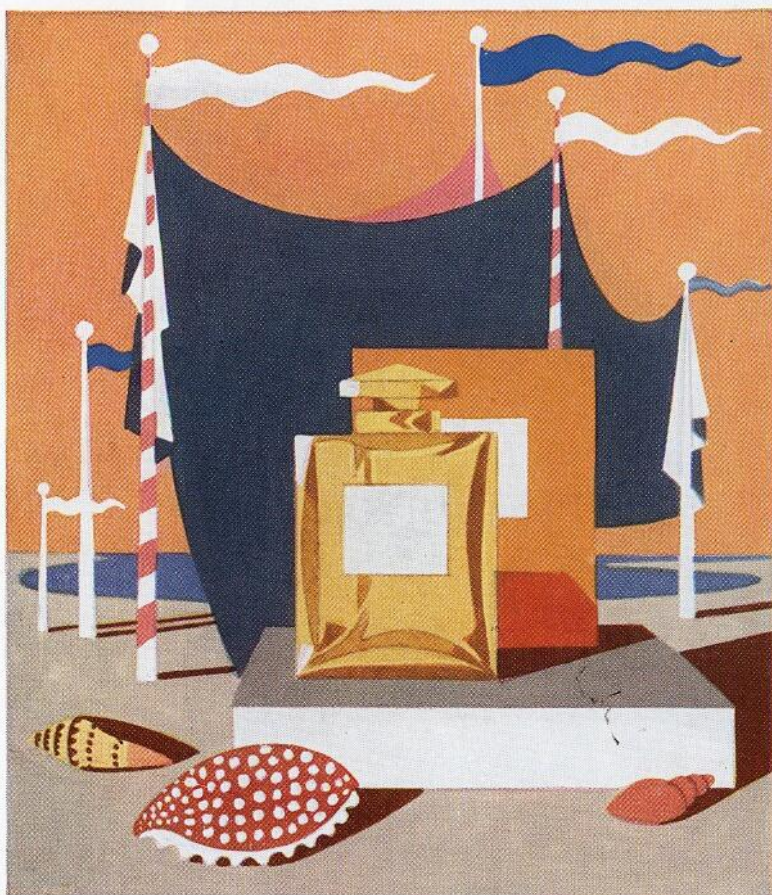




1 The problem here is to make the bottle the center of interest. This first color scheme fails because it lacks contrast.



2 First a few dark accents are added to the bottle, and a cast shadow is introduced on the box. Now the center of interest is seen a little more easily.



3 Next the other shadows are lowered in value. The drapery is changed to a deep, cool blue. An interesting pattern is added to the shell. Already the picture is much more forceful, and the bottle seems more important.



4 The warm sky still distracts the eye, so it is changed to a cool blue which forms a retiring background. The shell is made a lighter pink. Accents on the bottle are made still stronger. Now the most important form commands attention.



© TIME, Inc.

## Select a color theme

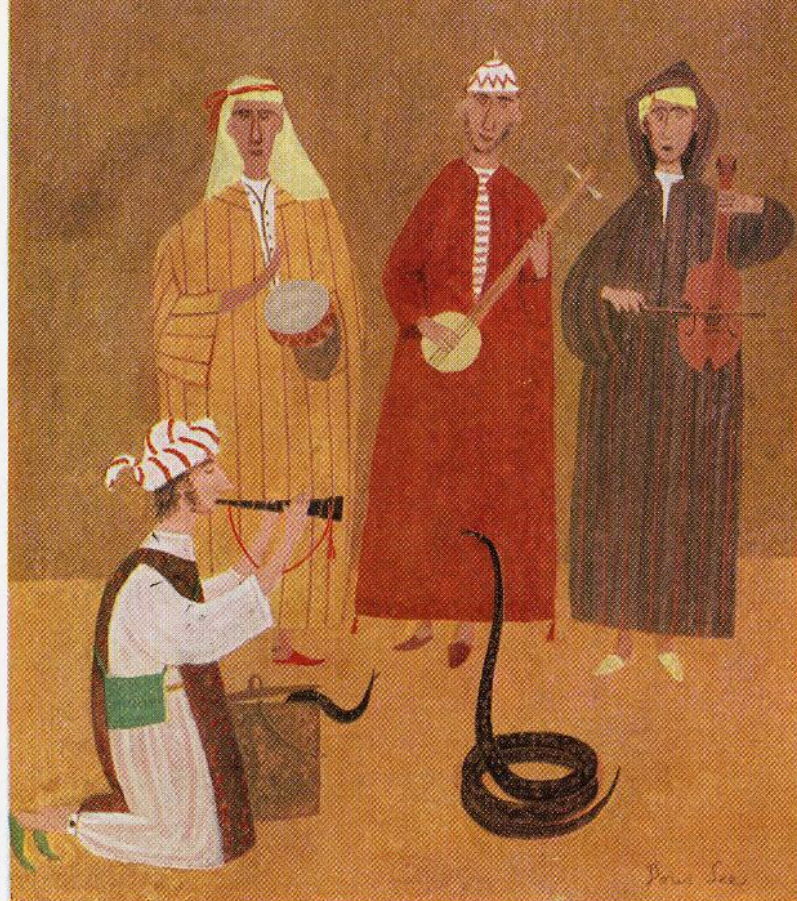
Always plan the color in your picture to create a definite effect that will strengthen the picture idea. The pictures on these two pages are fine examples of such planning. Next to each one is a strip of typical colors taken from the picture and isolated, to emphasize the color theme of the painting.

In Doris Lee's *Snake Charmer*, the limited colors consist chiefly of warm, dusty browns, appropriate for the heat of the North African locale.

Ben Shahn's *The Staircase* is a perfect demonstration of how to center attention through the use of color. The single discordant red note stands out dramatically against the cold grey-blues that dominate the rest of the picture.

Ernest Fiene's *New Snow* is an excellent example of how effective a limited number of grey, muted colors, can be when used in a sound design with strong value contrast.

Doris Lee's other picture *Summer Idyll*, contains dominant blues and greens which make this mid-summer scene a pleasantly cool one. Had she used *warm* greens, greys, yellow, etc., the effect might have been disagreeably hot.



Doris Lee — Snake Charmer



Courtesy City Art Museum of St. Louis



Ben Shahn — The Staircase







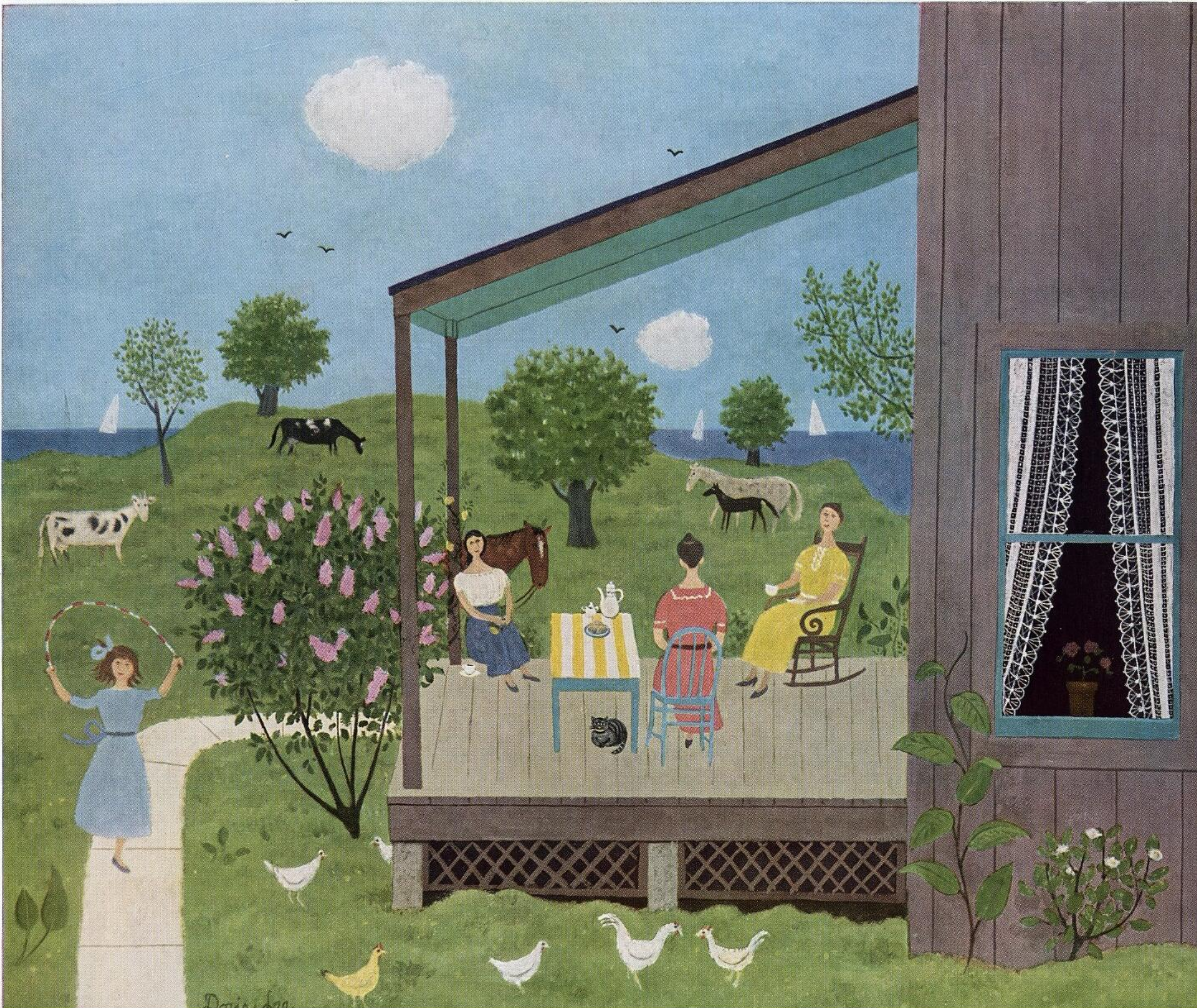
Ernest Fiene — New Snow

Courtesy The Metropolitan Museum of Art

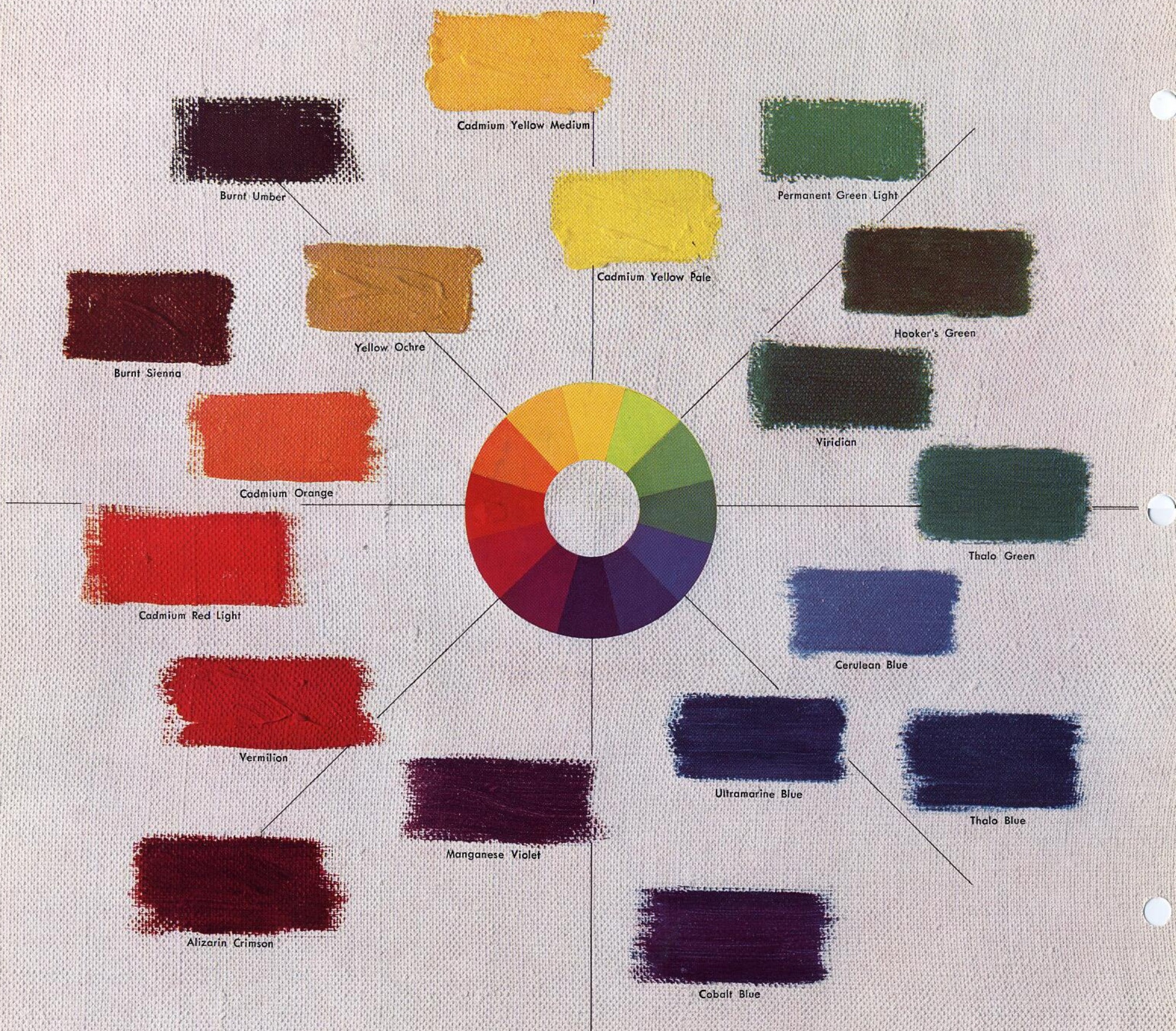


Doris Lee — Summer Idyll

Courtesy Abbott Laboratories







## The pigments you use

So far, we have described color only in terms of the hues of the color wheel, that is, yellow, yellow-orange, orange, red-orange, etc. However, the tubes of color which you buy in art stores are not named like the colors in the wheel. Instead, the colors are identified by *pigments* rather than hue. Pigments made from minerals have names like Cadmium Yellow, Chromium Oxide, or Cobalt Blue. Others, such as Ultramarine Blue, or Van Dyck Brown, take their name from their appearance, or from the artist who made the pigment popular.

On this page, we have arranged some of the most common and useful pigments around the wheel, to show you their *true hue*. For example, Burnt Sienna is orange in hue, although it is much

darker and less intense than pure orange in the color wheel. Cerulean Blue is a green-blue, while Ultramarine Blue is a more violet-blue.

Knowing the true hue of the pigment is especially helpful when you are using very dark colors in a painting. For example, if you wanted a consistent cool effect throughout your picture, you might spoil it by using Burnt Sienna, or Burnt Umber, for the dark accents because the basic hue of these colors is yellow-orange. A cool, dark pigment such as Viridian, or Ultramarine Blue, would be better. In order to recognize the true hue of these dark pigments more easily, mix a small amount of white with each of them.





With the pigments which are laid out along the edge of your palette, you can create almost any color effect that you wish. We recommend the following pigments as a good beginning palette. As you see them here, reading clockwise, they are:

Ivory Black  
Cerulean Blue  
Viridian Green  
Flake White  
Cadmium Yellow, Medium  
Yellow Ochre  
Cadmium Red  
Alizarin Crimson

One cup holds your painting medium, the other contains the turpentine for cleaning your brushes. Notice that the warm colors are laid out along the top edge, the cool colors along the side. Later, as you develop personal color preferences, you may want to add other pigments to these or substitute new ones.

The demonstrations in this section are done with oil paints, but you can apply the same principles of color mixing to other painting mediums such as casein, acrylic, or tempera colors, which you mix with water instead of oil or turpentine.

## The palette

The term "Palette" has two meanings to the artist. One is the actual board or mixing surface, as shown above; the other (and most important meaning) is the particular group of colors which shows up repeatedly in an artist's work, and helps us to identify it. In many cases the palette of the artist is so strongly personal that you could recognize a painting of his by the colors alone.

Even a casual study of the work of well known painters and illustrators shows how the palette of each one helps to personalize his work, and distinguish it from that of other artists. Some examples are the clashing colors of Van Gogh, the intense colors of Gauguin, or the pastel colors of the Impressionists who excluded black and earth colors from their palette.

Artists are apt to change their palette from time to time. They may do this simply because they become tired of the old one, or because the solution of a particular picture problem requires a new group of colors. Study the paintings by Doris Lee, Ben

Shahn and Ernest Fiene. They clearly demonstrate the value of an individual palette.

## Mixing

The best way to become thoroughly familiar with your palette, and gain confidence in using color, is to start right in mixing pigments. Begin with two colors, plus white. Each time you vary the amount of one of the three pigments, you create a new color. You will soon realize that with just a few colors, plus black and white, you can make limitless combinations.

Notice particularly, that the tints created by the addition of white to these colors tend to make them appear cooler; adding black tends to make them warmer.

It is not enough to read and study the next few pages. Get paints out, and actually mix up the combinations demonstrated. As you mix, note the colors you create with each mixture.



Here are the colors that we can make by mixing the yellow at the left with the red at the right. These two colors create orange. The orange and red make red-orange, and the orange and yellow make yellow-orange. Directly beneath are tints of these five colors, made by adding white to each one.



**Mixing** *continued*

Practically all the colors you will ever put down on canvas will have to be *mixed* on your palette. For this reason, you should form good mixing habits right from the beginning. Mix your color in the center of the palette, and wipe off your brush before picking up the pure colors squeezed out along the edge.

Above all, keep the mixtures *simple*. With two or three colors,

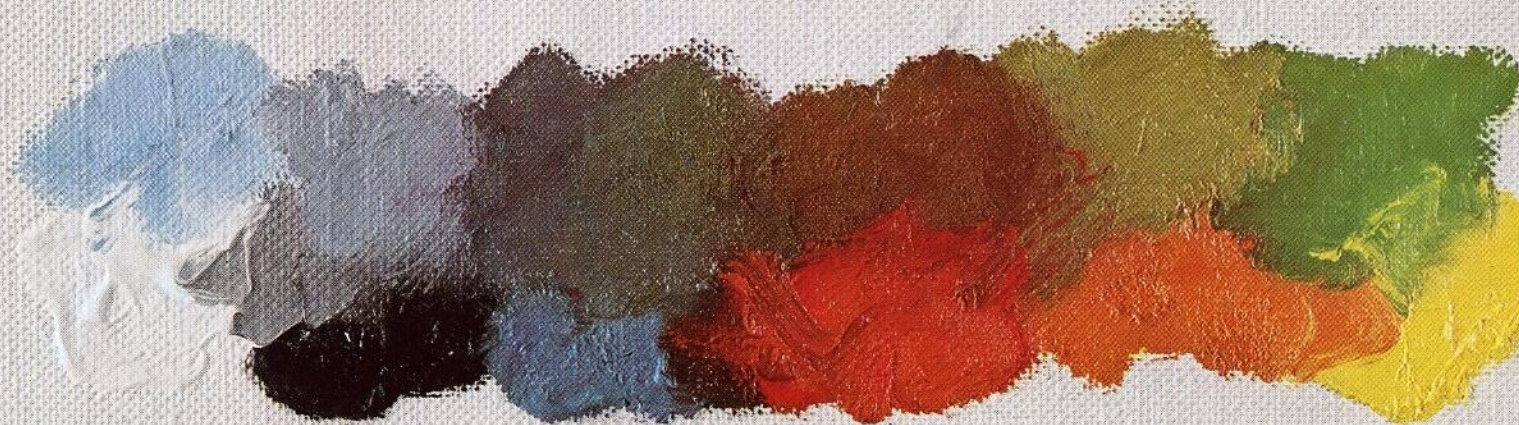
plus white, you can create almost any color you will ever need. If you mix up more than this you will probably end up with a muddy, dirty gray. Avoid dipping your brush aimlessly into one color after another. If you cannot seem to mix the color you want, stop, take a fresh look at the color in your subject, and compare it with those around it.



By mixing Cadmium Yellow, at the left, with Cerulean Blue, at the right, we produce these green tones — green, yellow-green, and blue-green. Beneath these pure colors are the tints made by adding white.



Here are combinations of Cerulean Blue and Cadmium Red. They make violet, blue-violet, and red-violet. The cooling effect of white on these colors is particularly noticeable in the tints.



This mixture shows a combination of red, yellow, and blue, plus white and black. Notice that the black darkens the value of everything mixed with it, and also creates grays. The mixture above gives you an idea of the wide variety of colors that you can make with just a few pigments, plus black and white.



## Mixing grays

Every artist must learn how to mix a wide variety of grays and grayish colors because the subject matter that he will be painting contains more of these muted passages than pure hues of high intensity. You will rarely find occasion to use color, straight from the tube, in your picture. Grays can be made in two ways: from black and white, or from complementary colors and white.

We have already discussed the handling of grays. We pointed out that lovely grays can be made from colors rather than from black and white paint. This principle is followed by many artists, though there is plenty of support for the use of black and white in making grays and gray colors. You should experiment and decide which method best suits your style and taste.



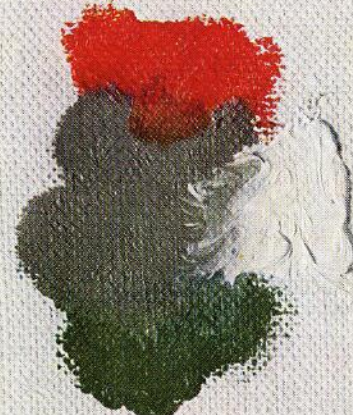
1. Flake White and Ivory Black made this gray—the only true, neutral gray on the page.



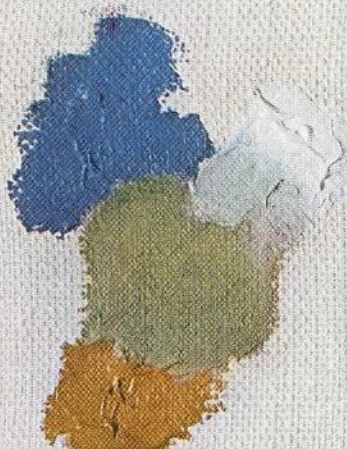
2. Cadmium Orange and its complement, Cerulean Blue, give us this lively grayish violet. Some white, of course, is used in all these mixtures.



3. A warm, yellowish gray can be made from Manganese Violet plus Cadmium Yellow (pale) and white.



4. The above gray is from a mixture of Cadmium Red (light) and Viridian, plus white. It is quite neutral.



5. This cool, green-gray results from a combination of Cerulean Blue, Yellow Ochre, and white.



6. Burnt Sienna, mixed with Viridian and white, produces a rich, warm, brownish gray.



7. The result of a mixture of Cadmium Red (light), Cerulean Blue, and white, is this violet gray.



8. An extremely cool blue-gray can be made from Alizarin Crimson, Viridian, and white.



These four mixtures are all made with Cerulean, Yellow Ochre, and white. They differ only in the proportions of color that have been blended together. Mixture (1) results in a light, warm, grayish yellow. Mixture (2) is especially warm, due to



an extra amount of Ochre being used. Mixture (3) is so balanced that the result is near neutrality, while mixture (4) becomes a darker, cooler blue-gray. Study these demonstrations carefully. Practice mixing up the combinations shown above.







Seurat — An Afternoon at La Grande Jatte

Courtesy Metropolitan Museum of Art

### The eye mixes color

On the preceding pages, the different colors were made by actually mixing or stirring one pigment into the other, with a brush or painting knife. For example, red mixed with yellow makes an orange paint, or red mixed with blue makes a violet paint. This, of course, is the usual way of mixing colors. However, you can also create the effect of an orange area in your painting, by placing small strokes, or dots, of pure red and yellow alongside of each other. Viewed from a slight distance, these red and yellow dots merge and appear orange. Red and blue dots appear violet. Dots of complementary colors, such as red and green,

yellow and violet, create a richer, or more vibrant gray than we get by mixing these colors on the palette. This type of painting, letting the eye mix colors, formed the basis for a whole school of painting, called "Pointillism," which developed in France during the 19th century. The detail above is from "An Afternoon at La Grande Jatte" by Georges Seurat, the best known member of this group. The pairs of swatches around the detail show in one square how the pure colors would be placed side by side. The other square shows the general effect of these colors when seen from a distance.



## Let's start painting

The demonstrations on the following pages are designed to show you: (1) how to recognize colors in nature; (2) how to mix up these colors on your palette; (3) how to apply them to your canvas.

To demonstrate these points, we have used color photographs to represent a real still life. When you study these photos, look at them as if they were *the actual objects*. Even before you pick up a brush, sit down and study the colors in the subject you are going to paint. Look at them through squinted, or half-closed eyes, and see them as *shapes of color*. We have already pointed out that there is no such thing as a single color for grass, another for sky, etc. The color in all materials will vary with each change in the light that strikes it. As you study the subject you are about to paint, ask yourself questions like these: First, what is the color of the light? Is it warm, or cool? Where is the darkest dark in the entire picture; the most intense color; the grayest color? If there are several red colors in this subject, which ones are cool, which warm? Each of these questions can be answered, by comparing *one color with the other*. In fact, you should be able to make a sort of mental color sketch, in which you accurately paint the relationship of all the colors in your subject. Unless you can create such a picture in your mind's eye, there is no use in mixing up pigments on your palette, since you won't know what color you are trying to create. Therefore, spend plenty of time simply looking at the colors in your subject.

Once you do begin to paint, relax and have fun. Put your colors down confidently, but not carelessly. Make it a special point to look for, and recognize, the wide variety of colors in the light, half-tone, and shadow areas of your subject. As you make these observations, follow through in your painting by mixing up small amounts of color, and making color changes with every few brush strokes. Do not mix up a large puddle of color. This encourages you to ignore interesting color changes, and to substitute large, monotonous areas of a single color.

### Compare colors on the canvas

Make it a habit to compare your colors *on the painting*, not on the palette, because one color is strongly affected by the other. Mix the color you want, and put a few strokes of it on your canvas. Then, stop and look at it. Compare it with the color next to it; decide whether it is too light, too dark, too red, etc., or just

right. Don't waste a lot of time trying to mix the exact color on the palette. Remember, your color will look different against the palette than it will on the painting.

Another thing to keep in mind is the *manner* in which you apply this color to your painting. Avoid mixing one color into the color alongside it, or beneath it. For example, suppose you decide on a certain color for a sky area, and a certain color for a foliage area: when you have mixed up the sky color, put it down and leave it alone. Do the same for the foliage. If you start brushing the color of the foliage into the sky, you will end up with paint which is neither the color of the sky nor the foliage.

### Painting from nature

If you study nature carefully, you will soon realize that you rarely see colors that are as strong, or as bright, as those you squeeze onto your palette. Colors like pure Cadmium red, or Cadmium yellow, should be used sparingly. Equally rare are cases in which you will find it necessary to use values as dark as pure black, or as light as pure white. Some painters find it helpful to tack two small squares of paper — one white, the other black — in the corner of their canvas. Then, they check the value of dark and light tones against these extremes. Whenever you are painting out-of-doors, there will be much more light on your painting than there will be when you look at it back in the studio. This stronger, out-of-door light makes the colors in your painting lighter, and more intense than they would be on your studio wall. Subtle color differences that seem just right while painting outdoors disappear in the weaker interior light. With experience, you will soon know how to compensate for this difference between indoor and out-of-door light.

You will also find it helpful, occasionally, to look away from your subject for a few minutes, in order to gain a "fresh eye." If you stare at the subject for long periods, you will lose sight of the proper color relationships.

Always be aware of the great variety of color that exists in everything you see. A group of rocks, or a pile of logs nearby, may seem to be the same in color as the sand on which they rest. The color variations may be very subtle, but they are there. In such a case, imagine how these materials would look if we actually sprayed all three of them with a single color.



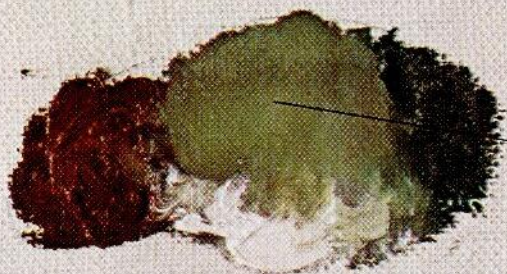


## Color in a still life



Let us assume that we have set up this still-life and are about to make a painting of it. Before we even pick up a brush, we study it carefully, comparing one color with another, deciding what colors are darkest, lightest, grayest, or strongest. At the same time we also try to decide what combination of pigments we need to create these colors.

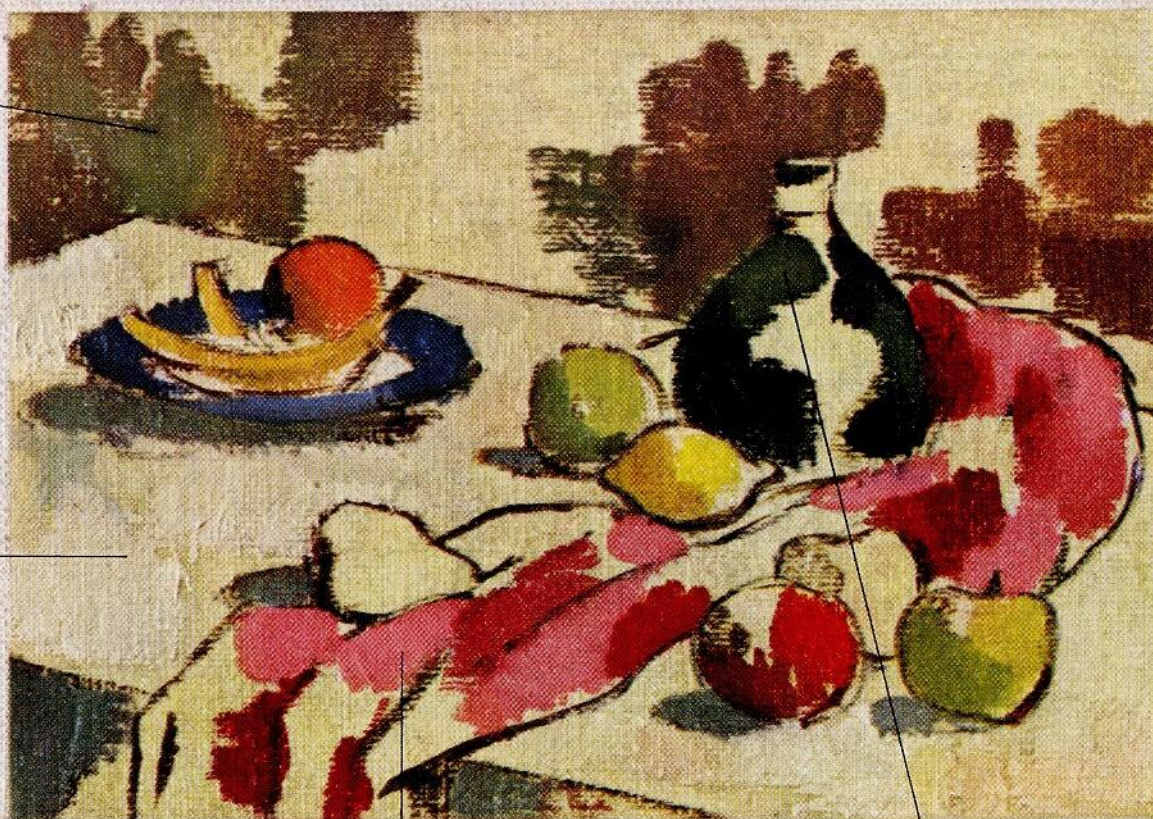
Although we look for a variety of colors within each object, we must not lose sight of the *basic local color* of each one. The bottle is green, the drape pink, the tablecloth white, and the background a warm gray. We decide to darken the background to bring out the tablecloth and drape.



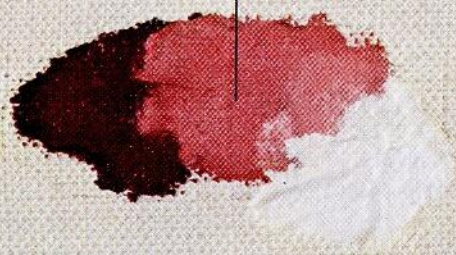
Burnt Sienna, Viridian and White



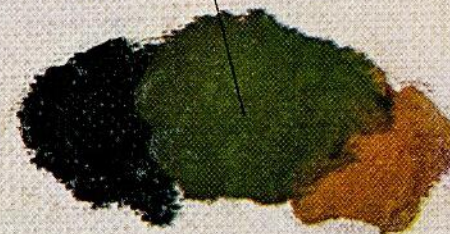
White and Yellow Ochre



**Stage 1.** First we *tone* the canvas with a thin, light wash of Burnt Umber and turpentine. This tone covers the pure white canvas and makes it easier to compare all values, *lights* as well as darks. When this tone dries we sketch in the still life, cropping the photo slightly at the left and bottom to improve the design. We relate main areas of color as quickly as possible. The lights are warm, the shadows cool. Note that these first few colors suggest *form* of objects in light and shadow, in contrast to the flat diagram of local color above. Comparison is easiest if we put colors of background, bottle, drapes, etc., *next* to each other. Note different yellows in apple, lemon and banana.



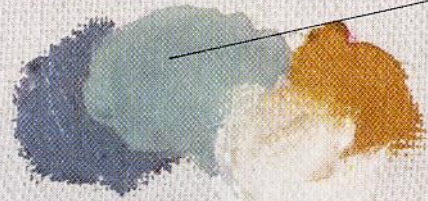
Alizarin Crimson and White



Viridian and Yellow Ochre



**Stage 2.** With the whole canvas laid in, we can compare colors accurately. See the definite differences in color between the light and shadow areas in the fruit, drape, and tablecloth. Note that all parts of the picture are equally unfinished. Don't waste time finishing up one section until you have compared it with all the other colors in the picture. If any colors need correcting, change them now.



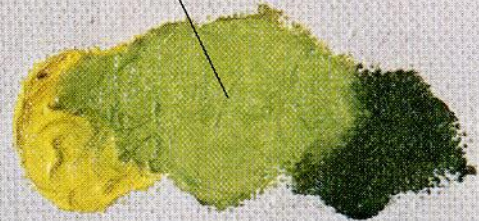
Cerulean Blue, Yellow Ochre and White



Alizarin Crimson and Cadmium Yellow



Alizarin Crimson, Cadmium Red and White



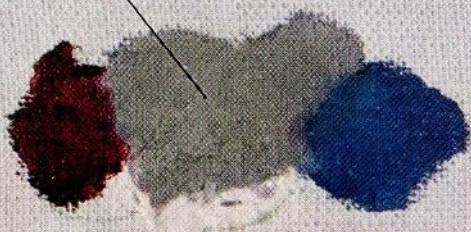
Cadmium Yellow and Viridian



**Stage 3.** The finished picture is simply a refinement of the second stage. The forms are painted more carefully, and necessary details, such as highlights, reflected lights and shadow accents, are added. The wall seems too warm, so we make it cooler and grayer to keep it in the background.



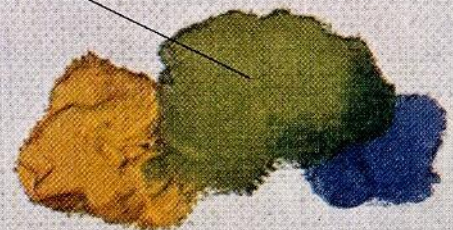
Ultramarine Blue and Viridian



Alizarin Crimson, Cerulean Blue and White



Cadmium Yellow and Cadmium Red

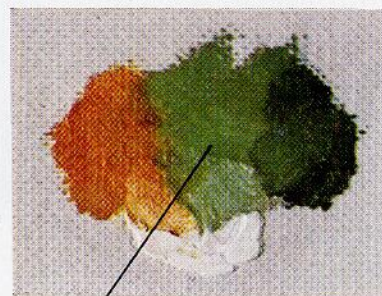


Yellow Ochre and Cerulean Blue

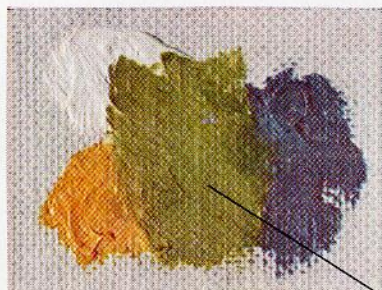




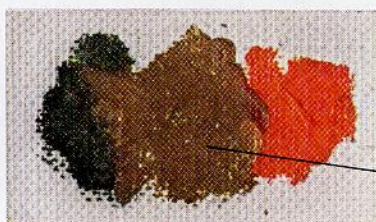
Cadmium Yellow (Light), White  
and Cerulean Blue



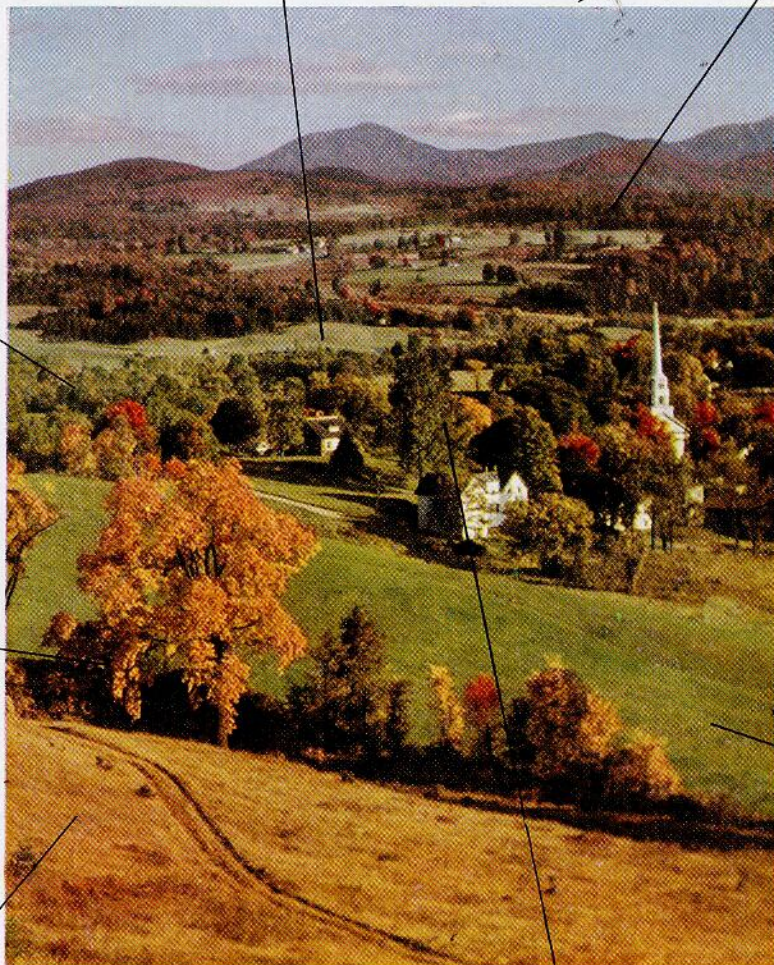
Yellow Ochre, White  
and Viridian Green



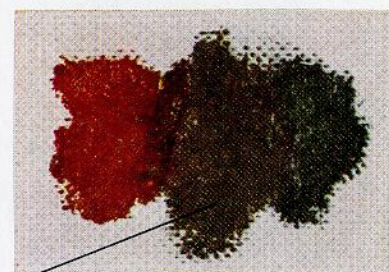
Cadmium Yellow (Deep), White  
and Cerulean Blue



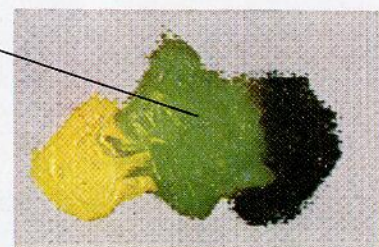
Viridian Green and  
Cadmium Orange



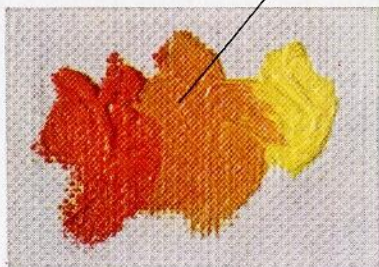
Courtesy Vermont Development Commission



Burnt Sienna and  
Viridian Green



Cadmium Yellow (Light)  
and Viridian Green



Cadmium Orange and  
Cadmium Yellow (Pale)



Black and Cadmium  
Yellow (Deep)

## Color in a landscape

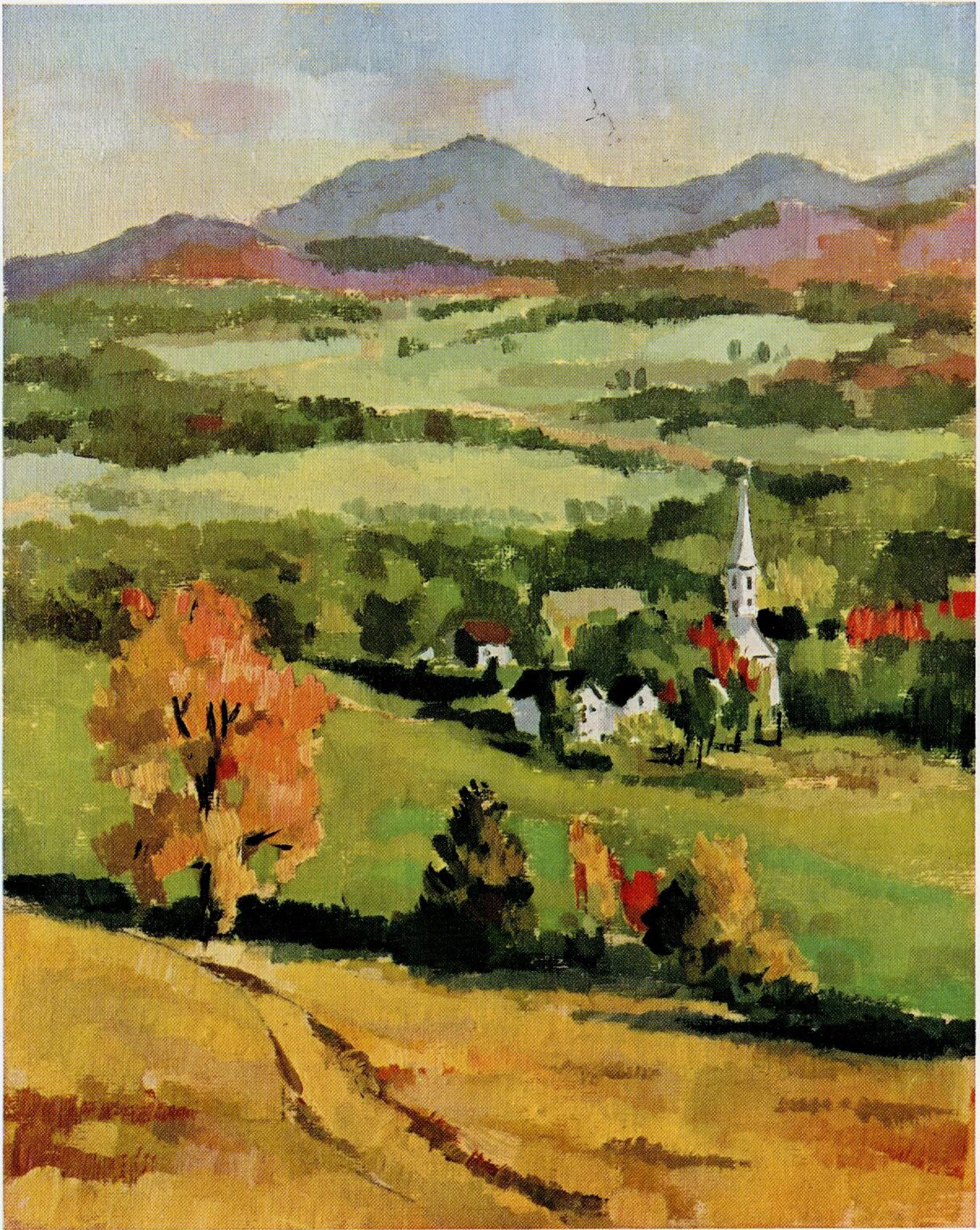
The photo above provides an excellent opportunity for comparison of colors in a landscape. The key to making a successful painting of this scene is *careful comparison of color*. Note the variety of warm oranges and yellows in the foreground, the greens in the middleground, and the various gray-blues and violets in the distance.

Before painting, study the scene carefully. Know where the strongest yellows and oranges are. Be aware of the variations of

green, and know how these colors relate to those in the distant hills and mountains.

Paint the scene in your mind's eye before you pick up your brush. With experience you will learn and remember what combinations of pigments to use in creating the colors you see before you. Then you will be able to look at a scene like this, mix up colors similar to those in the swatches, and use them to paint a picture like the one on the facing page.





This painting of the scene on the opposite page is the result of: (1) careful comparison of the colors in the landscape; (2) knowledge (gained largely through practice) of what pigments to mix for each color; and, (3) constant comparison and adjustment of the colors while painting. Like any good painting, this picture is not an exact copy of the photo. The artist has simplified and adjusted wherever he felt such changes would improve his picture.





Photograph by Andre de Dienes

## Color in a portrait

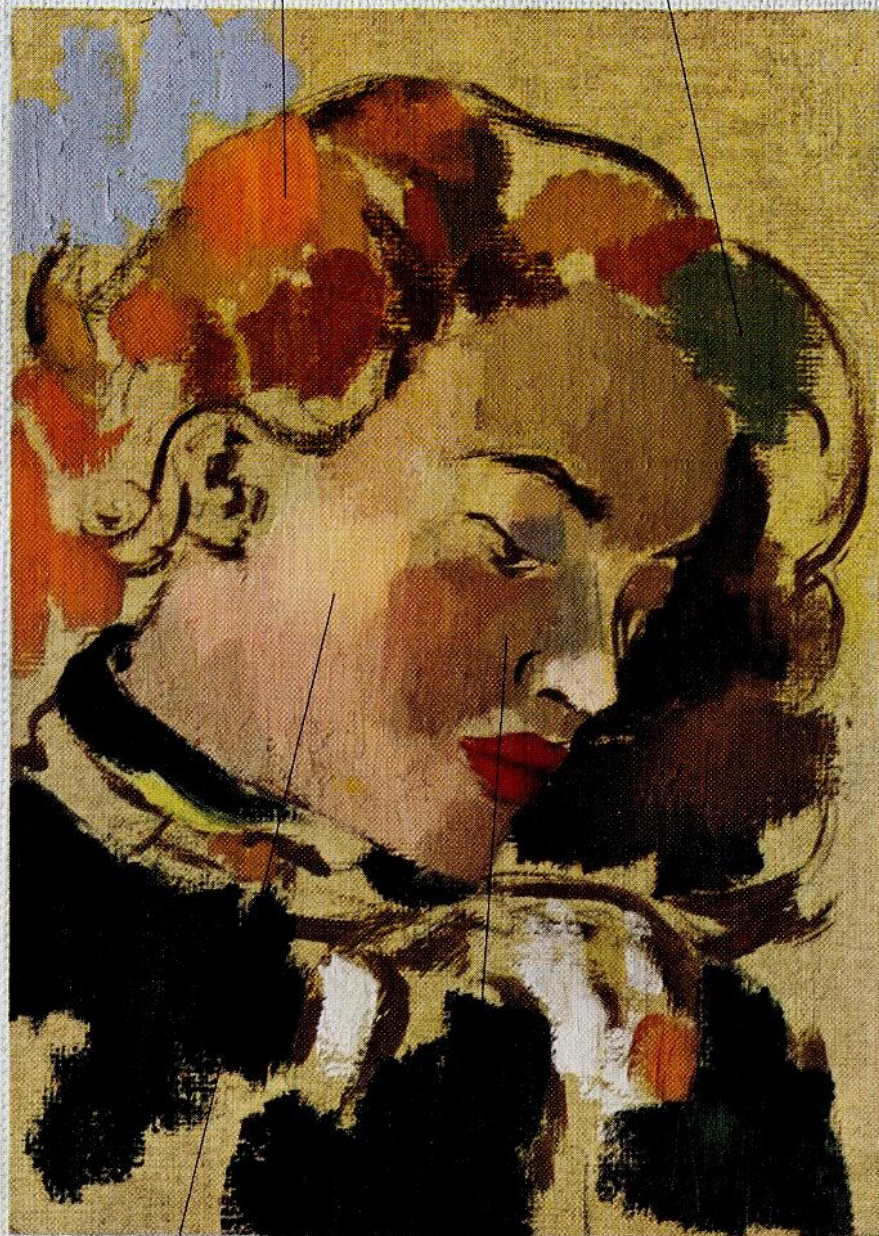
The use of color in a portrait should be approached in the same way as color in a still life or landscape. Look at your subject in terms of areas of color that vary with the light, halftone, and shadow planes. Remember that a head is just as *solid* a form as the apple in the still life, or the church in the landscape. *Always paint it as a form.*

Beginning painters often have difficulty because they paint as if they do not believe what they see. Instead of looking for, and comparing, the different colors in areas of light and shadow they try to mix up a "skin color," and apply it like make-up to the entire face. Naturally, this flattens out the head and destroys any illusion of form. They may add black to the shadows and white to the lights to create form, but the lights are chalky and the shadows muddy.

This demonstration is designed to show you how important it is to: (1) think of the head as a solid form, with planes of light, halftone and shadow; (2) see these planes as areas of warm and cool color; (3) recognize *subtle variations* of color within these areas.

Cadmium Yellow Medium  
Burnt Sienna

Yellow Ochre  
Cerulean Blue



Yellow Ochre  
White  
Alizarin Crimson

White  
Yellow Ochre  
Cerulean Blue

Viridian Green  
Alizarin Crimson

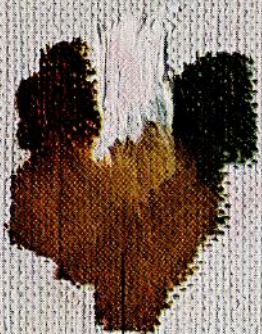
**Stage 1.** First, we tone the canvas and establish our basic drawing. The light planes are warm, and the shadows cool. With a few brush strokes we paint in the dark areas of the hair, flesh and sweater. Next, the light areas. Note that colors are put down as areas of light and shadow, not just single colors for the flesh, hair, and sweater. See how this difference of light and dark begins immediately to create the illusion of a solid head.



White  
Cadmium Orange  
Cerulean Blue



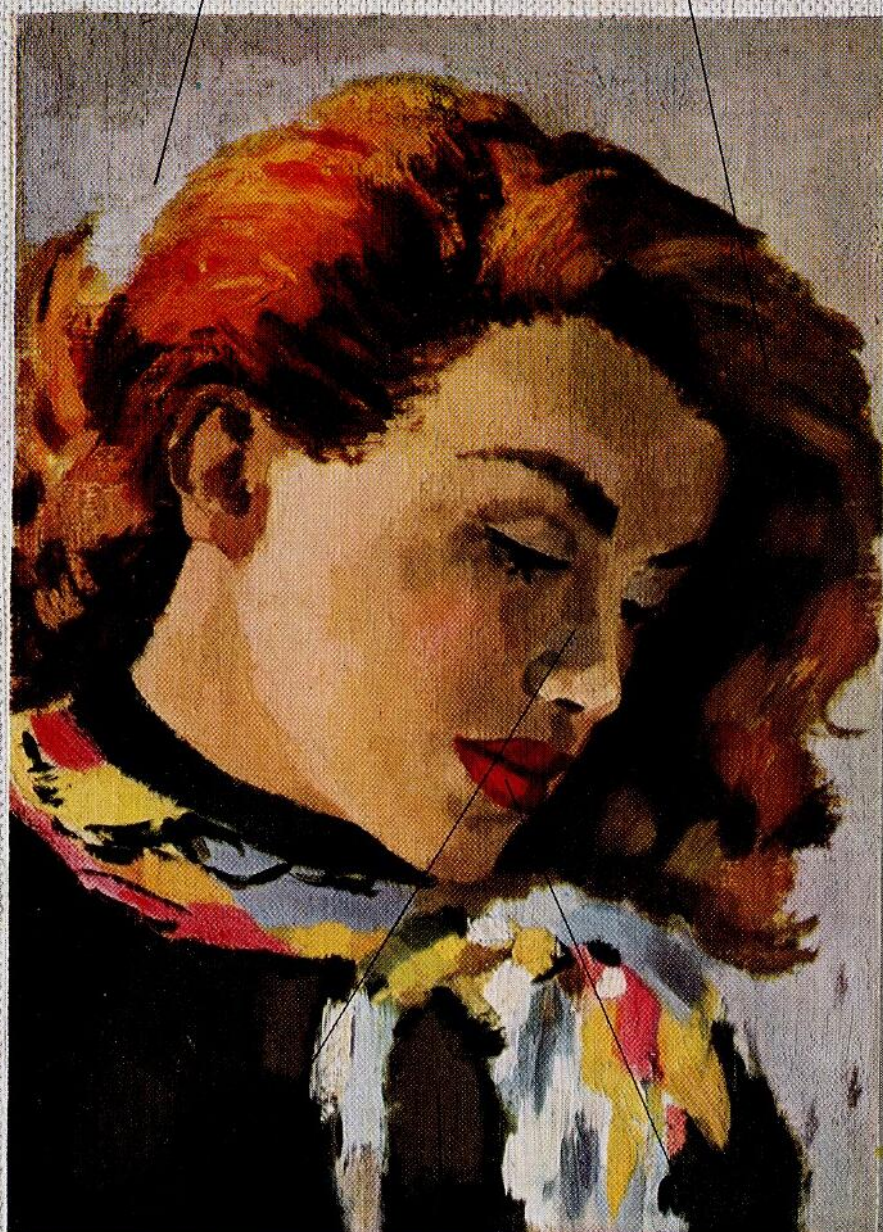
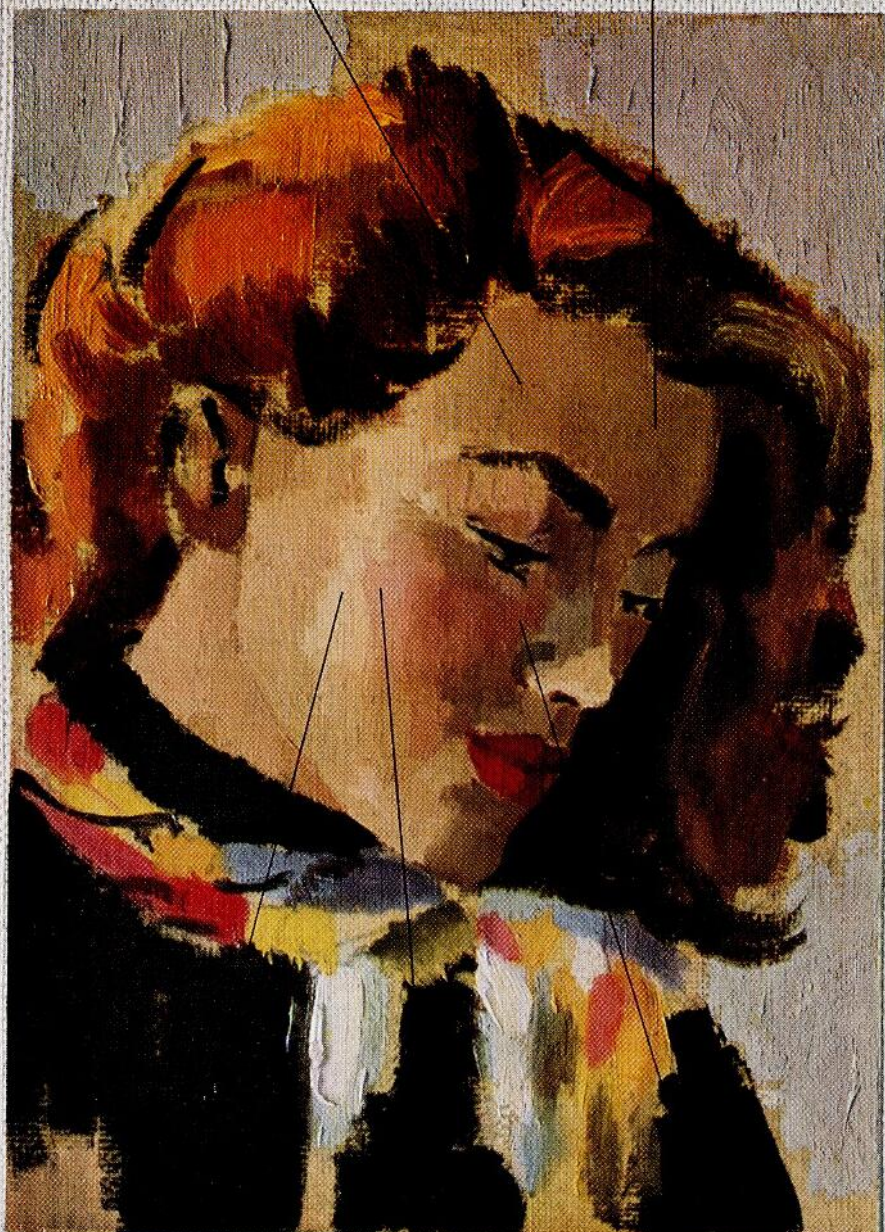
Burnt Umber  
White  
Viridian Green



Cerulean Blue  
White  
Alizarin Crimson



Cadmium Orange  
Viridian Green  
Cerulean Blue



Yellow Ochre  
White  
Cadmium Red



White  
Yellow Ochre  
Alizarin Crimson



Burnt Sienna  
White  
Cerulean Blue



Yellow Ochre  
Alizarin Crimson  
White  
Cerulean Blue



Cadmium Red  
White  
Cerulean Blue



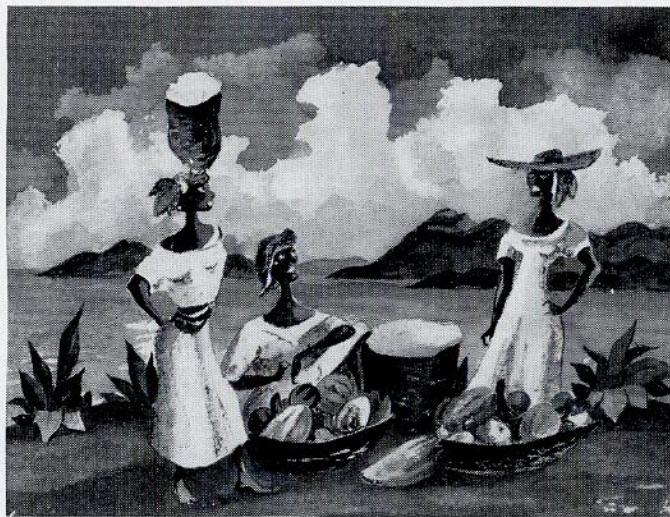
Alizarin Crimson  
White  
Cadmium Red

**Stage 2.** Next we turn our attention to the color in the *halftones*. These halftone areas must be studied very carefully. Their subtle color is not obviously warm or cool, but rather neutral, since the tones form the transition between the warm lights and cool shadows. However, you cannot create halftones by simply brushing lights into darks. They are colored grays that call for close observation. Note how neutral even the strongest flesh colors are compared to the scarf.

With the lay-in completed you can compare and adjust any colors that do not relate properly.

**Stage 3.** To complete the portrait there are no radical changes in the final stage, just refinements. For example, the background is made cooler, and cool reflected lights are added around the eyes and nose. We add highlights along the top of the hair, on the lower lip, and scarf. Notice that the lightest part of the face is much darker than pure white paint. It seems light only because of the dark tones around it.





This entire picture was painted in black and white tones.



In this one only two colors were used. They are brown and blue, plus white.

## Limited palette

One of the easiest ways to learn how to control color is through the use of a *limited palette*. This palette usually consists of two or three colors, plus black and white, as opposed to a fuller palette. In addition to black and white, a limited palette might contain just Cerulean Blue and Yellow Ochre, which would give you a warm and a cool color. Or you might use yellow and green, or green and violet, or any other combination you wish.

Because it requires considerable experience and practice to use a full palette of colors with the proper restraint, many students will find it helpful to see first what can be done with just two or three colors. If you restrict yourself to these few colors you will quickly learn how to achieve interest by simply using a variety of *values* and *intensities*. You will be surprised at the large range of color effects you can create by fully exploiting these two color dimensions.

The pictures at the right demonstrate this point. They also show us that color contributes far less to the success of a picture than drawing, design and value pattern. The first picture in black and white compares favorably with the colored ones below it.

For many beginners such restraint as we show here is difficult. They want to use their reds, yellows and blues throughout the picture, and often at full strength. If you encounter this same problem, try a limited palette to improve your control of color.



In this painting there are three colors, brown, blue, and yellow, plus white.



This is a full color painting which contains blue, yellow, brown, red, and white.